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AN EXPLORATION OF VARIABLES WHICH INFLUENCE STUDENT TEACHER BEHAVIOR IN

ELEMENTARY SCHOOL PHYSICAL EDUCATION CLASSES

by

CATHERINE E. CAMPBELL

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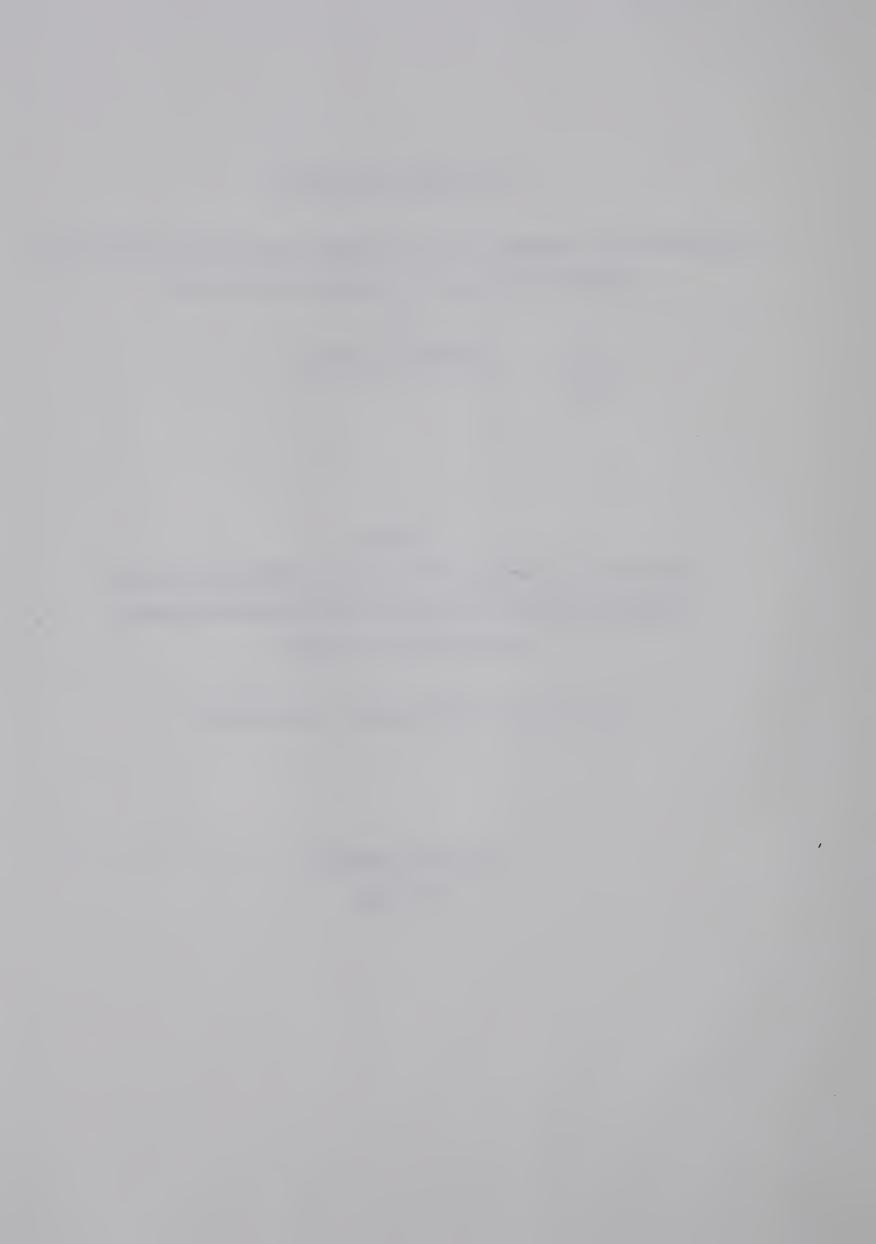
A THESIS

SUBMITTED TO THE FACULTY OF GRADUATE STUDIES AND RESEARCH

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The undersigned certify that they have read and recommend to the Faculty of Graduate Studies and Research, for acceptance, a thesis entitled AN EXPLORATION OF VARIABLES WHICH INFLUENCE STUDENT TEACHER BEHAVIOR IN ELEMENTARY SCHOOL PHYSICAL EDUCATION CLASSES submitted by CATHERINE E. CAMPBELL in partial fulfilment of the requirements for the degree of DOCTOR OF PHILOSOPHY.

ABSTRACT

The purpose of this study was to explore the variables which influence student teacher behavior in elementary school physical education classes. The intent of the study was to describe and interpret rather than explain or test a hypothesis and therefore no *a priori* categories, theories or models were used in the collection or analysis of data.

A conceptual framework, based on a general review of the research on teacher behavior, was presented to provide the reader with a perspective on how the researcher formulated the research problem and developed the methodology to examine it.

The methodology used was based on five aspects of phenomenological research: dialectic, intuitive, hermeneutic, analytic and descriptive. Every attempt was made to establish research rigor by undertaking procedures to establish credibility, applicability, auditability and confirmability. A multi-instrument approach using field notes, interviews and written surveys was employed to collect data. Content analysis and category development techniques were used to analyze the data.

The sample was comprised of eleven volunteer student teachers involved in their fourth year practicum experience working towards their Bachelor of Education at the University of Alberta.

The content analysis identified 2,559 units which were eventually reduced to 77 variables which were reported to influence student teacher behavior in elementary school physical education classes. Nine categories were developed which could account for all 77 variables.

Seven major findings were reported:

1. Student teachers make decisions regarding their behavior which they can recall, relate and justify.

2. Teacher behavior is a complex phenomenon which no single variable can explain.

3. A workable category system can be developed which is refined enough to be meaningful.

4. There is no basis for making generalizations regarding the use of the categories by individual student teachers.

5. More than one variable influences a single observed student teacher behavior.

6. "Teachers' ideas, beliefs and characteristics" is an influential variable in all phases of the teaching process.

7. Variables reported by student teachers as influencing their teaching behavior appear to influence differentially the interactive and non-interactive phases of the teaching process.

The findings of this research have confirmed a number of beliefs held by many educators. What may be more important is the research methodology utilized which provides a viable alternative for research on teacher behavior viewed from a multiple perspective.

ACKNOWLEDGEMENTS

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I. STATEMENT OF THE PROBLEM

A. Introduction

A perennial issue in research on teaching is why teachers teach the way they do. Little is known about the development of teacher behavior or about the variables which influence it. Witherall and Erickson (1978:229) state that the teacher's own development has been overlooked in educational research.

There appears to be a tendency in educational research to reduce the field of variables which influence the complex process of teaching by narrowly delimiting the research problem. Fedigan (1980:4) states that educational research has mainly focused on a part or an element of the teaching-learning process such as observable behavior. Researchers are thought to seek only that information which answers specific questions (Guba & Lincoln, 1981:70). Strasser (1963:195) suggests that, in general, researchers only ask questions they can answer.

Research on teacher effectiveness has attempted with little success to describe the relationship between teacher characteristics, such as empathy, and student achievement measured using methods such as gain scores. Later research focused on the relationship between mutually exclusive categories of overt verbal teacher behavior, such as teacher questioning, and student achievement using measures such as "engaged time" or "attention" as an indicator of achievement. Another research design focused on environmental variables, such as emotional climate, which differentially influence the teaching-learning process. Most recently research has concentrated on teacher decision making and thought processes during the interactive phase of teaching. Each of these research designs has been delimited to one aspect of the teaching-learning process without accounting for the other variables. This concentration on a single aspect of teacher behavior may be a factor in explaining why the results of educational research have appeared inconclusive. In fact, Guba and Lincoln (1981:81) assert that "discrete variables and their relationships do not seem to be sufficient to deal with the complex interactions and patterns of human behavior." It would seem that the design for research on teacher behavior should ideally account for as many of the variables which influence the teaching process as possible, thereby avoiding an oversimplification of the problem.

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To this end, components of the research designs (teacher characteristics, observable behavior, environment and decision making) previously used in research on teaching should be accounted for.

On review, there seems to be a great deal of research undertaken on teaching behavior and its influencing variables and therefore, it may seem to be a mundane and overworked topic for research. While researchers in various fields have been focusing on teacher behavior and the reasons for it, we still do not seem to understand it. Barrett (1958:115) states:

> In a human situation the waters are usually muddy and the air a little foggy...man himself is a creature of contradictions and ambivalences such as pure logic can never grasp.

In fact, it seems that we rarely question our everyday, routine behavior. Schutz (1978:133) considers the ideal of science to be the determination of what things actually are in our mundane life-world, to determine how the meaning of each can be made intelligible. The day to day act of teaching may seem to be ordinary, practical and unremarkable. Natanson (1978:182) and Stanage (1976:58) note that the researcher examines what is seen as odd, unusual or taken for granted in an attempt to understand it. What is sometimes seen as typical or unexceptional may in fact be a complex and multidimensional phenomenon.

This study focused on asking teachers one deceptively simple question: "why did you behave the way you did?" It was hoped that by keeping the question open-ended the many faceted nature of teacher behavior would become clearer and thus more understandable.

B. Purpose of the Study

The purpose of this study was to explore the variables which influence student teacher behavior in elementary school physical education classes. The study focused on the question, "to what variables do student teachers attribute their behavior?" Denton (1981:596) describes the purpose of exploratory research as examining the total configuration of actions including behavior, motive and purpose or intent.

The intent of the study was to describe and interpret rather than explain or test a hypothesis. Denton (1979:13) and Strasser (1963:264) suggest that a researcher does

not have the ability to predict behavior as one can never have enough knowledge of the variables which surround the behavior. As Van Manen (1975:7) states "...the inherent aim (of human research) is understanding aspects of the human life world in the sense of gaining insights into the processes and results of human activity."

As the general purpose of this research was to describe and interpret variables which influence student teacher behavior, it must be remembered that "intuitive understanding may be nothing more than misunderstanding" (Strasser, 1963:168–169). Denton (1979:15), Strasser (1963:170) and Vandenburg (1974:193) all stress that any interpretation must be open to revision – there is no "last word." Ricoeur (1973:34–35) explains that due to the perplexity of human behavior there is always more than one way to interpret a phenomenon. Denton (1979:14) has found that descriptive research provides a basis for others to compare their experiences and interpretations. It is hoped that this research may serve such a purpose in the future.

C. Significance of the Study

To understand teaching, the development of teacher behavior and the variables which impinge upon it must be explored. Fedigan (1980:39), when summarizing his review of the literature on classroom management, indicates that there is a need for research exploring the complex relationships among the variables that make up the classroom system. This understanding would (1) aid in the planning and organization of the educational environment, (2) assist in implementing curriculum innovations, and (3) facilitate the development of effective preservice and inservice teacher education programs. Vandenburg (1974:202) proposes that the purpose of exploratory research is to furnish a foundation for further research. The results of this study will hopefully contribute to the knowledge base in educational research and may suggest directions for further research on teacher behavior.

D. Research Strategy

Researchers in the social sciences have objected to narrow categorization for data analysis (Dallmayr, 1973:147) apparently because many researchers have tried to fit

their data to a predetermined definition, hypothesis, model or theory. Vandenburg (1974:214) states that if a researcher uses a rigid framework for analysis, there is a danger that the dimension examined will dominate all other dimensions. Data should not be forced into existing models, theories or categories which may unnecessarily confine the analysis. Research based on beliefs and theories may just serve to perpetuate preconceptions and judgements (Spiegelberg,1971:656). Authors, such as Wax (1971:8-10), maintain that if the researcher is not tied to a rigid methodology, the systematically obtained data will guide the direction of the research.

When the purpose of research is to observe teacher behavior and to explore the reasons for that behavior in order to learn about and gain an understanding of human behavior Glaser and Strauss (1966;1967:3), Wax (1971:8), Withy and Jaeger (1980) and Wolcott (1973;1980) suggest the utilization of a naturalistic multi-instrument approach. Strasser (1963:259) and Chamberlin (1974:129-130) state that utilizing various research methods when examining a phenomenon broadens the horizon and gives a wider perspective. The use of multiple perspectives in research enhances the probability that the phenomena will be viewed from different standpoints and not an exclusive point of view.

This study reflected this research position. No *a priori* categories, models or theories were utilized for data collection or analysis. Wilson (1977:260) states that the researcher uses previous research and theories to select the research problem rather than using them as the framework for the analysis of data. The conceptual framework for this study therefore provided an initial focus for the definition of the problem, and was not presented as a theory to be proven or disproven.

E. Assumptions

The study was based on the following assumptions:

1. Magoon (1977:652) states that humans are "knowing beings," their behavior is purposive. People attempt to control their existence and make decisions they try to justify (Strasser,1963:27).

> Freedom emerges as a reality conditioned by a person who has, with at least some responsibility, adopted a particular style of life, a style that inclines him toward values consonant with it, and who always exercises choice within a particular incarnate situation (Kelly & Tallon, 1972:257).

It was therefore assumed that student teachers made decisions regarding their behavior whether their decisions were conscious or not.

2. Vandenburg (1979:166) states that "each person is inwardly aware of his own feelings, emotions, moods, desires, thoughts, volitions, projects and goals." It was therefore assumed that subjects were able to recall and relate their thoughts prior to, during and following a teaching incident.

F. Delimitations

The study was delimited to a sample of eleven volunteer student teachers in the final phase of their education practicum in elementary education at the University of Alberta. These student teachers were observed teaching physical education classes in elementary schools.

G. Limitations

The three principal limitations of this study restrict the basis for generalization of its findings.

1. When individuals become the objects of scientific inquiry it must be remembered that the data and analysis is specific to individuals bound by a specific time and setting. (Tillich, 1952:132).

2. Although the results and discussion presented in this study frequently refer to the student teachers as a collective, they remain individual persons.

3. The data for this study were gathered from the perceptions of eleven student teachers while the analysis and discussion was based on the intuition of the researcher. As such, the interpretation remains open to further consideration and individual interpretation by the readers.

H. Organization of the Thesis

This study has been organized into six chapters. The first four present the introduction, conceptual framework, design of the study and results of the field research. The fifth chapter first discusses an interpretation of the data from an intuitive perspective then considers the results and interpretation in light of previous research on teacher behavior. In the last chapter the findings are outlined, implications are drawn and recommendations for further research are suggested.

II. CONCEPTUAL FRAMEWORK

An initial review of the literature on teacher behavior was undertaken to provide a basis for defining the research problem and to aid in the development of the research methodology. The purpose of the chapter is to familiarize the reader with how the research stragegy evolved.

This chapter presents a rationale for the development of the frame of reference for this study and a perspective on possible influences on teacher behavior.

A. Rationale

The conceptual framework proposed in this chapter followed the tradition initiated by Kurt Lewin (1951) with his "cognitive field theory" in which behavior is viewed as a function of personality and environment. The rationale for the conceptual framework was based on categories of variables identified in a review of existing teaching–learning process models (see Appendix A). Three broad categories were selected for the framework: (a) context, (b) interactive process variables, and (c) teacher characteristics. These were selected to maintain the primary purpose of the study: to identify variables which influence teacher behavior.

General models such as the one described by Dunkin and Biddle (1973:36) identify teacher variables, teacher/student classroom behavior, environment, and pupil achievement or product as broad classes of variables which impinge on the teaching–learning process. The perspective proposed for this study deviated from the more general models by categorizing pupil behavior, pupil characteristics, and pupil achievement as contextual variables. Because this study focused on teachers, their behavior and the variables which influence that behavior, any pupil related variables were classified as part of the environment for teachers.

Systematic observation of teaching and classroom interaction appears to have resulted in little new knowledge. Martin (1979:48) contends that there is minimal evidence to correlate effectiveness with teaching behavior. However, observation research has increased the knowledge of what teachers actually do. The perspective proposed for this study included observable behavior, represented as interactive process variables, as an

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integral dimension as well as context, teacher thought processes and teacher characteristics. Magoon (1977:652) and Wilson (1977:253–258) caution that human behavior has more meaning than the phenomena a researcher can actually observe. The meaning and purpose of the behavior must be accounted for. Records of observable behavior were used in the study interview situation to probe the teacher's reasons for those behaviors.

Shulman and Lanier (1977), Shavelson (1980), Conners (1978a) and Tuckwell (1980a) focused their research on teachers' thought processes during instruction, theorizing that how teachers behaved was affected by what they thought. Such research assumed that subjects are willing and able to both recall and relate their thought processes. While recent research has focused on thought processes during the interactive phase of teaching, the framework for this study accounted for thought prior to the instructional period. The benefit of this approach was suggested by Conners (1978a:301) who concluded that other variables such as values and personality were intrusive and influenced behavior. While these variables may not be recalled as conscious thought during the interactive phase of teaching, they may be articulated as being influential by the subject.

· The perspective for this study most closely resembled that proposed by Ryans (1963:43) who describes three categories: external information, information processing during the interactive phase, and internal information and capabilities, the emphasis being on decision-making during the interactive phase of teaching and information processing. Ryans' model was based on systems theory where the teacher was seen as an "open, self-organizing and self-regulating system" (Ryans, 1963:31) bounded by its capabilities, characteristics and the situation in which it was operating. Ryans (1963:9) theorizes that information processing culminates in observable overt behavior. The perspective for this study deviated from Ryans' model by

a. including decision-making prior to the instructional event,

b. not presupposing a sequence of behavior, and

c. having variables under the direct control of the teacher as a major category.

The perspective proposed was based on the assumption that teachers make decisions regarding their behavior whether that decision was conscious or not.

Barker (1978a:3) states that "behavior and environment are inexorably continuous in time." When examining human behavior a researcher cannot ignore the setting in which it occurs because behavior cannot be understood except in that context (Chamberlin, 1974:129–130). Strasser (1963:305) states that man chooses, acts and decides within that context within which the action takes place. The ecological psychologists focused on what settings do to people (Barker, 1978b:285) utilizing observable behavior and behavioral habitats to examine human behavior. The framework to be proposed for this study utilizes both of these categories but also includes teacher characteristics and considers the teacher's covert thought processes.

B. Working Framework

The purpose behind presenting this frame of reference was to designate gross features in a model of teacher behavior to aid in the early stages of the research, not as a theory to be tested for validity.

Three broad categories were selected for the framework: (a) context, (b) interactive process variables, and (c) teacher characteristics. The framework was based on the assumption that student teachers make decisions regarding their behavior. The variables listed within each of the categories serve as examples only: the list is not exhaustive.

CONTEXT

pupil behavior	equipment/facilities
pupil characteristics	administration
official curriculum	university degree requirements
school community	culture
cooperating teacher	classroom climate
nature of the task	time

Context was seen as including those variables which constrained the teaching–learning process but were not under the direct control of the teacher.

INTERACTIVE PROCESS VARIABLES

curriculum decisions

time allocation

instructional techniques

pupil organization

organization of equipment/materials

Teaching behaviors included those observable incidents which were under the direct control of the teacher.

TEACHER CHARACTERISTICS

home life

school experience

sport experience

cognitive capabilities

teaching experience

beliefs and values

teacher education

movement education courses

affective characteristics

physiological capabilities

cultural upbringing

Teacher characteristics included all those experiences prior to the teaching-learning process which contributed to the development of the teacher.

C. Summary

The reader is reminded that the perspective proposed constitutes a working model only. As presently described, the framework included aspects of all four traditional research designs – observable behavior, teacher characteristics, environment and teachers' thought processes. The purpose in presenting this frame of reference was to familiarize the reader with how the research strategy was formulated, it was not presented as a model to be verified. The perspective presented in this chapter provided a basis for defining the research problem and developing the research methodology, it was not used for data collection or analysis. Only after the data was collected, analyzed and interpreted, was existing research again consulted to ascertain if it could add anything to

the discussion. Until that time, the researcher attempted to set aside any preconceived

notions as to what might influence a teacher's choice of instructional behavior.

III. THE DESIGN OF THE STUDY

This chapter presents the research methods utilized in this study. The section begins with an overview of the essential aspects of phenomenological research which provides a backdrop for the rest of the study design. A section is included on research rigor outlining procedures undertaken to enhance objectivity, reliability and validity. The sample selection, instrumentation, data collection and data analysis techniques are then described. The chapter ends with a section reporting the design, implementation and results of a pilot study.

A. Phenomenological Methodology

Phenomenology utilizes a methodology which represents a protest against reductionism by empirical scientists. Yinger (1977:26) contends that a dialectic process has been long needed in educational research. Collins (1979:11) states:

> ...whereas empirical science seeks to depersonalize and thereby refine the perceptual basis of human knowledge, phenomenology strives to reintroduce the personal elements in knowing in order to understand how human knowledge is influenced by human imagination, desire and will.

The motto of phenomenologists has been "to the things themselves:" researchers must return to the source of the inquiry. Kelly and Tallon (1972:233) describe phenomenology as a method that draws from all human sciences in order to provide a basis for a perception of man.

A phenomenological methodology represents a means of satisfying the purpose of this study and the philosophical belief of this researcher concerning research on teaching. Instead of narrowly delimiting the research problem, phenomenology opens the field to the diverse aspects of teacher behavior. Phenomenology attempts to describe and interpret phenomena rather than explain or test theories. Phenomenology acknowledges the freedom of individuals within their setting to make decisions and does not lose sight of personhood by objectifying the subjects of the inquiry.

Marleau-Ponty (1965), Strasser (1963) and Spiegelberg (1971) admit there is no agreed upon definition of phenomenology. Spiegelberg (1971:653) states that "phenomenology not only shows vast differences in its manifestations, but has also

served as a tool for extremely divergent enterprises." In exploring the literature on phenomenology, this researcher could not discover or formulate one definition of phenomenology which would satisfy the diverse views of the major writers in the area. What can be outlined are the essential aspects of a phenomenological methodology. Spiegelberg (1971:655), after completing an in-depth history and analysis of the phenomenological movement, states that there is little disagreement among phenomenologists concerning the core of their methods.

This section will present the essential aspects of phenomenological research which provides the basis for the methodology used in this study.

Five Aspects of Phenomenological Methodology

The description of the aspects of a phenomenological methodology outlined in this section are drawn largely from the works of Strasser (1963) and Spiegelberg (1971). Stanage (1976:65) and Spiegelberg (1971:659) outline the three essential components of phenomenological research as: (1) intuitive focusing, (2) analysis and (3) description. Strasser (1963:249-259) maintains that in addition to these three aspects phenomenological research must also be (4) hermeneutic and (5) dialectic. These five components of the phenomenological method will be discussed in the remainder of this section and their use in this study outlined. Although the presentation of these elements will suggest an order for their use, in actuality, all five aspects are operating throughout the research project.

The dialectic component of phenomenological research unveils aspects of the phenomenon to present a picture of reality. Spiegelberg (1971:656) states that dialectics represent a protest against simplification of the research problem. The dialectic aspect attempts to disclose and resolve contradictions through the utilization of multiple perspectives and phenomenological reduction.

The use of multiple perspectives in this research necessitated the employment of a variety of research techniques including observation, interview and questionnaires. Fourcher (1981:177) maintains that to ensure multiple perspectives, the phenomena must be viewed from different standpoints and not an exclusive point of view. To neutralize a one-sided perspective (1) the students were asked to validate the interviews and that list

of variables extracted from it which influenced their teaching behavior and (2) two independent analysts familiar with the analysis techniques used in this study, two doctoral students in educational administration and two recent Bachelor of Education graduates in elementary education were asked to participate in the data analysis.

Phenomenological reduction or cognitive bracketing also aids in satisfying the dialectical aspect of phenomenological research. Phenomenological reduction essentially means adopting a neutral position – attitudes, beliefs, presuppositions, preconceptions, prejudices and interpretations are inhibited, suspended, bracketed or turned off (Spiegelberg, 1971:692–694,724–727; Kelly & Tallon, 1972:257). Denton (1979:7) defines cognitive bracketing or phenomenological reduction as the "conscious, intentional act of setting aside accustomed perceptual sets and interpretive frameworks." Spiegelberg (1971:656) maintains that although emancipation from preconceptions is a difficult project, it is not impossible. Phenomenological reduction enhances the unprejudiced exploration of phenomena by considering all the data equal. Spiegelberg (1971:649) states that the researcher returns to previous experience and prior knowledge after the phenomenological description has been completed to explain the description further. The researcher in this study attempted to set aside preconceived notions which might influence her by not referring to the literature on teacher behavior · after defining the research problem. Only after the phenomenological description was completed was the existing research in the area again consulted. To facilitate cognitive bracketing, no *a priori* models or theories were utilized for data collection or analysis.

The intuitive aspect of phenomenological research refers to a cognitive act in which a phenomenon is contemplated and explored. This includes insight which can be interpreted as the essence or nature of the phenomenon (Strasser, 1963; Spiegelberg, 1971:711). Strasser (1963:263) contends that intuitive insights arise when all the data or evidence is in agreement. To acquire an intuitive grasp of the phenomenon, the researcher looks, listens, compares, asks and examines patterns. Observation, field notes and grouping of units from the content analysis of the interviews aided in the investigation of the phenomena.

Spiegelberg (1971:718) defines hermeneutics, when used in descriptive research, as the science of interpretation where the researcher attempts to uncover meaning

which is not readily observable. Hermeneutical methods attempt to uncover essential characteristics and meaning in order to discover underlying coherence or sense (Natanson, 1973:24-25; Ricoeur, 1973; Taylor, 1973:47; Strasser, 1963). Rist (1977:44) maintains that "it is from interpretation of the world through the perspective of the subjects that reality, meaning and behavior are analyzed." Rist (1979:20) also states that the one way of uncovering the meaning of behavior is to learn from those involved, by asking them to use introspection to analyze their own behavior. Introspective techniques were used in the interview situation as well as when the respondents were asked to analyze the interview transcripts and variables uncovered.

Spiegelberg (1971:669-671) describes the analytic component of the phenomenological method as exploring the phenomena without interpretation: investigating essences. In this research, the analytic phase involved the content analysis of the student teacher interviews. As part of this analysis, units were grouped into variables and described using as much of the student teachers' wording as possible. No inferences concerning the groupings were made.

The descriptive element of phenomenological research occurs as concepts become apparent, patterns emerge and categories become visible (Denton, 1979:9; Vandenburg, 1974:217). Spiegelberg (1971:673) portrays description as the classification of phenomena where the researcher assigns content units to places within a framework where they show similarity, resemblance and membership. The next part of the process involves describing the categories, relationships and connections. The development of categories and discussion of results fulfills this part of the phenomenological methodology. The phenomenological description can occur only in conjunction with the other four aspects of the method.

Most writers in the area of phenomenological research would agree that these five aspects are integral to descriptive research. The actual methods the researcher uses to fulfill these components depend on the research problem and the field situation.

B. Research Rigor

Guba and Lincoln (1981:103) state that "meeting tests of rigor is a requisite for establishing trust in the outcomes of the inquiry." Every attempt was made to make this research as reliable, valid and objective as possible. For the purposes of this research, the Guba and Lincoln (1981) concepts of credibility, applicability, auditability and confirmability were used because they are appropriate for descriptive research. Each of these concepts will be discussed in the following sections.

To help in establishing rigor, each participant was asked to complete a respondent questionniare (see Appendix B) which evaluated the interview questions, respondent honesty, the interviewer, reliability and validity. The questions were rated on a one to four scale with an average of three (75% agreement) on any question designated as an acceptable level. A response of "do not know or no opinion" was discarded from the analysis. The findings of the questionnaire will be presented in the appropriate places in the following discussion which will outline the procedures used to establish credibility, applicability, auditability and confirmability.

Credibility

Credibility refers to internal validity: does the description and interpretation represent reality? Confidence in the truth value of the findings must be established. Following Guba and Lincoln's (1981:104-115) suggestions, these measures were taken to establish credibility:

a. Member checks: each respondent had the opportunity to confirm that the interview and variables extracted represented the factors which influenced their teaching behavior. On the respondent questionnaire, subjects were asked if they had been frank and honest. The average response was 3.75 out of a possible score of 4.00 and therefore acceptable because it surpassed the designated level of 3.00.

b. Prolonged engagement: each subject was observed and interviewed three times and at the end of each interview the respondents were asked if there was anything else which influenced their behavior. On the respondent questionnaire, the student teachers were asked if they had received ample

opportunity to express themselves and whether the interview was adequate to cover the variables they thought were important influences on their behavior. The result on these two questions was 3.65 and therefore acceptable.

c. Cross-checks: a variety of data sources were used - observation, interview and questionnaire.

d. Records: field notes, interview tapes, interview transcripts and written responses to questions were collected.

e. Peer debriefing: colleagues were asked to corroborate the evidence and analysis to see if it was consistent.

Applicability

Applicability refers to generalizability or external validity. Denton (1979:14) and Guba and Lincoln (1981:116) state that it is the readers who decide if the information is applicable to them. Cronbach (1975, cited in Guba & Lincoln, 1981:61) states that generalizations decay with time and become "less science than history." The description and analysis is context bound. Lutz and Iannaconne (1969:124) and Guba and Lincoln (1981) maintain that if descriptive research is reliable, it is usually valid. One suggestion for enhancing applicability is detailed description which may aid further comparisons and further interpretations. It has been recognized in the limitations of this study that due to the data being (1) time and space bound and (2) related to individual persons, while (3) the analysis was largely based on intuition, the basis for generalization was restricted.

Auditability

Auditability refers to consistency and reliability. The purpose of confirming auditability is to determine whether the findings of the study could be replicated. Guba and Lincoln (1981:120-124) suggest the following methods for enhancing auditability:

a. Overlap methods: as previously stated a number of research methods were utilized.

b. Stepwise replication: six independent analysts plus the principal researcher

were utilized in the content analysis and development of categories.

c.   Audit trail: the methods utilized and category development were carefully recorded and described.

Confirmability

Confirmability describes neutrality and objectivity. It is important to establish confirmability to ascertain that the data and the findings are based on the information provided by the subjects and not the biases of the researcher. In phenomenological research, individual experiences and perceptions are frequently used. Scriven (1972, cited in Guba & Lincoln, 1981:125) states that individual experiences are not necessarily unreliable, biased or a matter of a opinion just as group experiences are not necessarily reliable, factual or confirmable. Guba and Lincoln (1981:125-127) suggest these methods, already discussed in previous sections, for increasing confirmability: utilizing a variety of methods, persistent observation and member checks.

The respondent questionnaire dealt with three aspects of confirmability: question bias, interviewer bias and question comprehension. The interview questions were ascertained as fair and free from prejudice because an average score of 3.7 was reached on those questions. With an average response of 3.2, the interviewer was established as trustworthy. The questions were seen as understandable by the interviewees because an average of 3.0 on those items was recorded.

In summary, using the methods described above to establish credibility, applicability, auditability and confirmability, the researcher made every attempt to enhance the rigor of this research.

C. The Sample

Of the approximately one hundred and fifty fourth year elementary education students who were approached through class presentations to participate in this research nine consented. The low response rate may be due to the student teachers' anxiety regarding the final phase of their teacher preparation and therefore their reluctance to

have a stranger in their classroom was understandable. An additional four students, who heard about the project through word-of-mouth, also volunteered. Fourth year students in the final phase of their education practicum experiences were chosen for two reasons: (1) these student teachers take over the entire class from the cooperating teacher for all curriculum areas; and (2) these students may be more comfortable as research subjects since they have had prior experience in the schools as student teachers.

Each of the volunteers was asked to fill out an information sheet (see Appendix C) which explained (1) the right of the subjects to withdraw from the study at any time with their data, (2) the nonevaluative nature of the research, and (3) the confidential nature of the information they disclosed. These sheets also gathered information concerning the volunteer and their movement education training.

The participating school boards, cooperating teachers, Education Practicum coordinators and Field Services representatives were contacted to obtain permission to observe and interview the thirteen students. One principal and one cooperating teacher declined and the two student teachers involved were deleted from the sample.

Of the remaining eleven student teachers, nine were female and two male. The subjects' education in elementary school physical education curriculum areas ranged from 0 to 6 courses in movement education activity courses. The student teachers were involved with one of three local school boards and their teaching assignment ranged from Kindergarten to Grade Six.

D. Instrumentation

Several research techniques were used in this study. The following sections describe the collection of field notes, interview procedures and the respondent reaction survey. In naturalistic research, the researcher becomes a research instrument. Guba and Lincoln (1981:129-138) ascribe these advantages to the investigator as a research tool: responsive, adaptable, holistic, capable of utilizing an extended knowledge base, capable of immediately processing data and providing opportunities to clarify, summarize and explore.
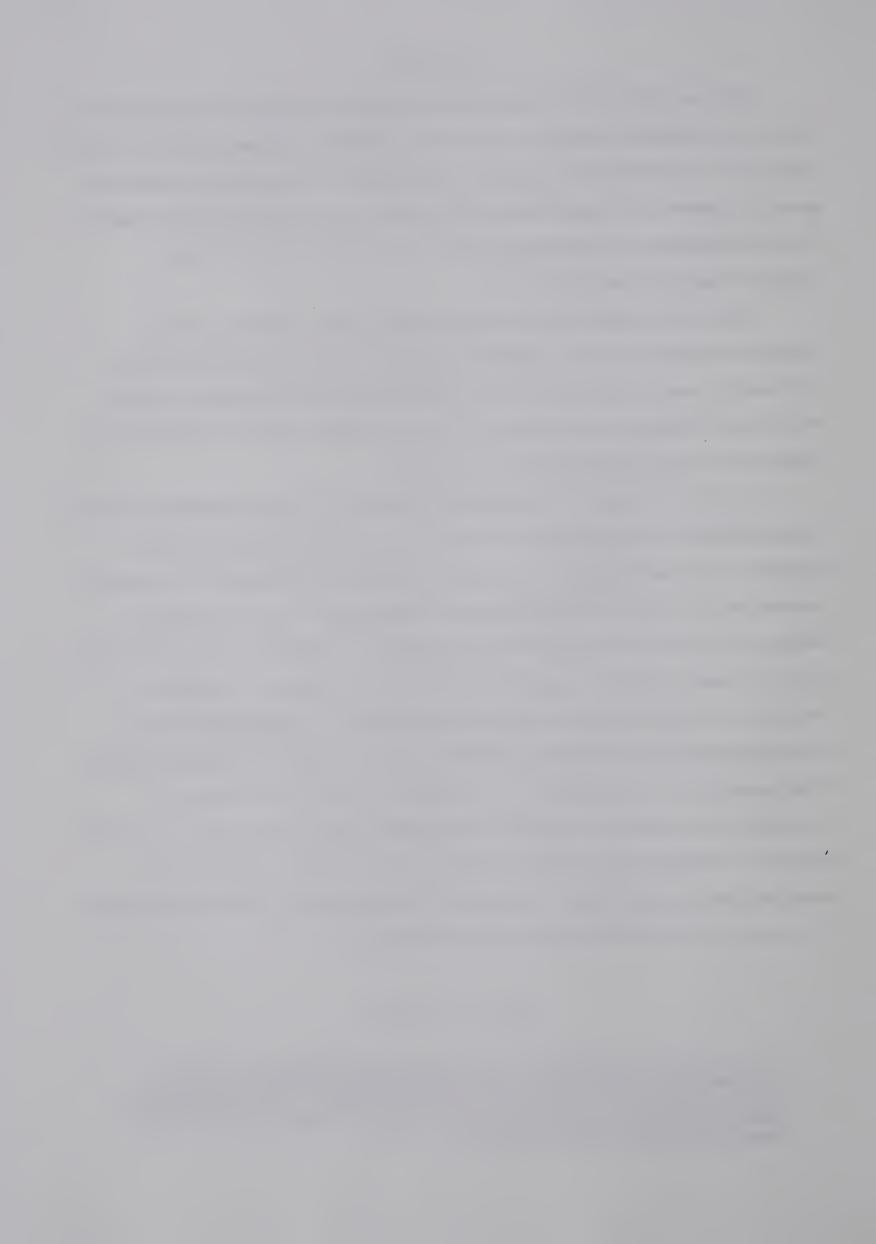
Field Notes

Guba and Lincoln (1981:193) describe two important aspects of observation: (1) it enhances the reaseacher's ability to grasp motives, concerns and beliefs and (2) it permits a view of the subject's world, by observing phenomena in a natural setting. Observation allows the researcher to record events as they occur which increases validity because the two techniques occur simultaneously. Field work maximizes the discovery, description and interpretation of action.

The primary reason for observing the lessons was to witness and record behaviors and events in order to guide the interviews. Field notes on the observation were kept to assist in stimulating the recall of the subjects as to possible reasons for their choice of behaviors. The field notes were also utilized to discover variables in the field situation which may be relevant to the analysis.

Each student teacher was observed for three physical education lessons. The field notes collected on the lessons took the form of anecdotal statements in a running account of what was observed. The notes preserved the chronological order of events to assist the researcher in aiding the student teacher to recall specific incidents by relating the incidents prior to and following the event to be recalled. Gordon (1956, cited in Guba & Lincoln, 1981:184) suggests that field notes should cover three areas: (1) observational notes, (2) anecdotal notes deriving meaning from observations and (3) methodological notes on operational aspects of the field situation. In this study the field notes recorded events pertaining to such areas as instructional techniques, pupil organization, time allotment, organization of equipment/material, environment, curriculum decisions, personal behavior of both teachers and students, pupil responses and anecdotal notes on attempts by the researcher to derive meaning from the observations. For a sample of the field notes collected see Appendix D.

Interview Procedures

> ...when reasons for behavior or action are manifest, there is no need to ask, but when the behavior appears inexplicable, or when the inquirer finds he does not understand the guiding rules for certain events or situations, then the behavior principles are latent and must be sought by means other than simple observation (Guba & Lincoln, 1981:157).

The meaning and intent of observed behavior need to be drawn from the subject. The interview becomes the vehicle whereby this information is solicited. Rist (1977:44) contends that "inner understanding enables a comprehension of human behavior in greater depth than is possible from the study of surface behavior." Kerlinger (1973:480) and Guba and Lincoln (1981:166) state that the purposes of an interview as an exploratory device are to

a.   identify variables and relations,

b.   uncover motive, intent or an explanation on the part of the respondent,

c.   ascribe meaning to an event, situation or circumstance, and

d.   guide other phases of the research.

Each of the participants were interviewed after each of the three observation periods to ascertain why they chose to utilize the teaching behaviors observed. To maximize the complete and accurate recall and reporting of variables which influenced the student teacher's behavior during the elementary school physical education lesson, the measures outlined by Tuckwell (1980b:6-7) to establish rapport between the interviewer and subject were utilized:

a.   the interview commenced with social interaction aimed at establishing a relaxed atmosphere and introduced the researcher as an interested colleague,

b.   the anonymity and confidentiality of the session was guaranteed,

c.   the objectives of the study were outlined to reduce the possibility of the subjects constructing their own theory about the intent of the interview and thereby distorting the information disclosed, and

d.   the student teachers were assured that neither their teaching behaviors nor the reported variables which influenced them were being evaluated.

The field notes gathered during the observation of the physical education class were utilized to stimulate the recall of specific behaviors and their possible cause(s). Conners (1978b:1) defines stimulated recall as:

> ...a branch of introspective methodology in which audio and/or visual cues are presented to facilitate a subject's recall of the covert mental activity which occurred simultaneously with the presented cue or stimulus.

In previous studies (Conners, 1978; Tuckwell, 1980; and others) stimulated recall was used to identify covert mental activity which occurred simultaneously with the cues or the

stimulus. In this study the field notes served as a stimulus to the subject to recall both simultaneous thought and other possible variables which influenced their choice of behaviors.

Conners (1978b:1) and Tuckwell (1980b:9) caution that to minimize memory loss interviews should be completed within twenty-four hours and not longer than forty-eight hours after the observation period. Most of the interviews in this study were conducted immediately following the observation period and none were delayed longer than twenty-four hours. The times for the interviews were arranged to suit the student teacher's convenience. Approximately twenty-five incidents were extracted from the field notes to serve as the basis for the interview questions because this ensured an interview ranging from twenty-five to forty-five minutes in duration. These incidents covered instructional techniques, pupil organization, time allotment, organization of equipment/materials and curriculum decisions. The purpose of the interview was to have the student reflect upon and identify the variables which influenced their choice of teaching behavior. The interviews were audiotaped and transcribed for later use as data for the respondent reaction survey and content analysis.

Respondent Reaction Survey

To establish the validity of the interviews, the interview tapes were transcribed and returned to the participant to verify as a valid represention of their perceptions of the variables which influenced their teaching behavior. For a sample of an interview transcript see Appendix E. At this time the student teachers had the opportunity to rephrase, add or delete any information they had revealed during the interviews. This technique of returning the interview transcript to the interviewee enhanced the data because the participant had time to reflect upon their responses. The subjects also received a copy of the list of those variables extracted from the interview transcript using content analysis and which had been reported as influencing or being the reason for their teaching behavior. The respondents were asked to add or delete variables to make the list representative of their perceptions of those factors which influence their teaching behavior in elementary school physical education classes. The student teachers were also asked to choose the ten variables seen as having the greatest influence upon

their behavior and were requested to rank them.

To check on objectivity, reliability and validity throughout the data collection process, each respondent was asked to complete a questionnaire which was returned to the researcher separately to ensure confidentiality and anonymity. The questions covered respondent honesty, interviewer objectivity, question objectivity, reliability and validity. The results of this questionnaire, which indicated acceptable levels on all five aspects, have already been reported in the section earlier in this chapter on research rigor.

For a sample of the materials returned to the student teachers see Appendix F.

E. Data Analysis

The analysis of the interview transcripts was directed to identifying and classifying variables which influenced student teacher behavior in elementary school physical education classes. Guetzkow (1950) identifies two aspects of content analysis: separating the communication material into units and developing a category system into which the units can be placed. The following two sections on content analysis and category development describe the data analysis procedures undertaken in this study.

Content Analysis

A content analysis was completed on the interview transcripts to identify variables which influenced student teacher behavior in elementary school physical education classes. Holsti (1969:14) describes content analysis as a means of systematically and objectively identifying relevant content characteristics of communication. Marland (1977), Tuckwell (1980a:65; 1980b:1) and Guba and Lincoln (1981:247) contend that content analysis is appropriate when analyzing interview transcripts.

The procedures outlined by Barrington (1981:95-103) and Conners (1978a:104) were utilized in the content analysis of the interview transcripts:

    a.   each transcript was coded segment by segment where a segment was defined as a set of exchanges between the interviewer and interviewee,

    b.   the variables were unitized by bracketing them where a unit was defined as

a remark or series of remarks which expressed an idea or served a function (Taba, Levine & Elzey, cited in Tuckwell, 1980b:3; Conners, 1978a:98-99). For the purposes of this study, a unit was defined as a variable which the subject attributed as being a reason for or influence on their behavior,

c.   if a unit was repeated on several occasions, it was listed once but a record of the number of occurrences of that unit was kept,

d.   the list of units was returned to the interviewee for verification, and

e.   the list of units was revised for use in the development of categories.

Each transcript was analyzed by bracketing the reported reasons for or influences on the student teacher's behavior. For a sample of the content analysis of an interview transcript, see Appendix E. The bracketed units were extracted from the transcript to serve as a rudimentary list of variables which influenced student teacher behavior. The initial list of variables extracted from the transcripts was limited to only those items which appeared in the transcripts. According to Guba and Lincoln (1981:242) only later in the interpretive stage is the researcher permitted to use insights and intuition to draw inferences. A record of the number of occurrences of each unit was kept to aid in the data analysis and the discussion of results. The initial list of variables was returned to the subjects to modify in order to maximize credibility and applicability. The revised list of variables was then used for the development of categories.

Category Development

Guetzkow (1950:48) states that the purpose of developing categories is to identify classes or pigeon holes into which the units of a content analysis can be placed. Because no *a priori* theoretical construct was used for categorization, the meaning emerged as opposed to its being imposed on the data. Guba and Lincoln (1981:240) state that *a posteriori* category development is advantageous as it guarantees that the categories will be grounded in the data. MacKay and Marland (1980:6) and Guba and Lincoln (1981:245) contend that when there are no norms for classification, the development of categories is often done on a trial and error basis. The development of categories was therefore a function of the data and intuition.

The list of variables developed through the content analysis of interview transcripts, with any additions or deletions by the respondents, was used for the development of categories. A combination of the procedures outlined by Tenove (1982:71-72), Guba and Lincoln (1981:93-94) and Barrington (1981:95-103) were used in the development of the categories:

a.   the units were summarized into a comprehensive list,

b.   the units were reviewed for similarities and differences,

c.   a descriptor was selected for similar units using as much of the respondents' wording as possible,

d.   the compressed list of units was validated with two independent analysts,

e.   the list of units was modified following the suggestions of the independent analysts,

f.   the revised list was validated with four other independent resource people,

g.   the descriptor for each unit or variable was placed on an index card to facilitate sorting,

h.   two independent analysts familiar with the use of content analysis and category development sorted the cards into large categories,

i.   the elements of the category sets were combined into one list of classes of variables,

j.   the same two independent analysts sorted the cards into the category set,

k.   the category set was modified following the suggestions of the independent analysts,

l.   definitions were developed for the categories,

m.   the objectivity and reliability of the categories and sorting of variables into the categories was established by having four independent resource people sort the cards into the categories, and

n.   intra-researcher objectivity and reliability was established by having the principal researcher sort the cards into the category set on two separate occasions.

The first step involved sorting and grouping similar units which appeared sensibly related. Once this was completed, the variables were transferred onto index cards and

randomly numbered. Two independent analysts familiar with the use of content analysis and category development reviewed the grouping and descriptors assigned to the aggregated units. Using their suggestions, a revised list was developed. This list was again reviewed and revised by the same two independent analysts. This list of variables was given to two recent Bachelor of Education graduates in elementary education and two doctoral students in educational administration to verify.

The same two independent researchers sorted and classified the index cards. Upon completion the variables and their classification were discussed and regrouped to their mutual satisfaction. The researcher then selected the initial categories and sorted the variables into the category set. The two independent analysts were given the list of categories once more and asked to classify the variables into them. No definitions of the categories were given at that time. Again, with discussion, the cards were reclassified and categories discussed. At this time, definitions for the categories were developed. Categories were modified until the system was complete and each unit could be logically accounted for.

The objectivity and reliability of the category development was checked between researchers. Intra-researcher objectivity and reliability was also be checked by analyzing the same list of variables several times. The analysis of both inter and intra-researcher objectivity and reliability was investigated using a Scott's coefficient (see Appendix G). Tuckwell (1980b:12), after reviewing the literature, recommends a reliability coefficient of 0.70 as an acceptable level of reliability.

The last stage of category development was to consult the same four independent resource people to confirm the objectivity and reliability of the categories and classification of variables. The purpose was to ascertain whether the categories were internally consistent, mutually exclusive and exhaustive (Guba & Lincoln, 1981:93-97; Kerlinger, 1973:137). The same four resource people were given the definitions of the categories and asked to group the variables into them. A Scott's coefficient was again used to establish the reliability of the category development and its utility in classifying variables.

F. Pilot Study

When the techniques, feasibility, and appropriateness of the research techniques are unknown to the researcher, it becomes appropriate to conduct a pilot study. This section will describe (1) the specific objectives of the pilot study, (2) the sample used, (3) the procedures undertaken, (4) comments on the results and (5) some conclusions.
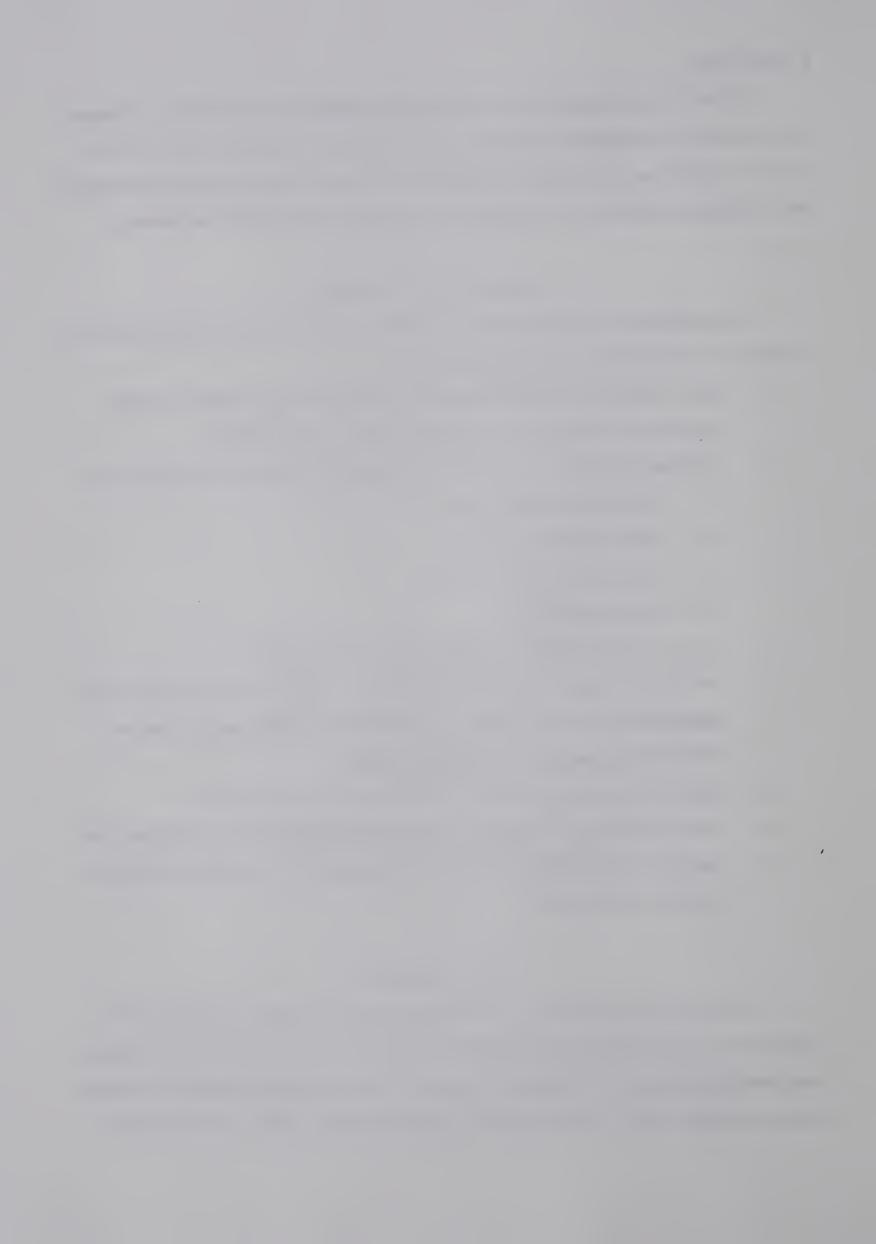
Purpose of the Pilot Study

The purposes for a pilot study, as outlined by Tenove (1982:56–57) and Tuckwell (1980b:12), were utilized and include measures to

a.　gain competence with and sensitivity to the gathering of field notes, the conducting of interviews and the transcription of audiotapes,

b.　establish the objectivity, reliability and validity of the interview technique by

　　1)　identifying interviewer bias,

　　2)　identifying question bias,

　　3)　ensuring respondent honesty,　·

　　4)　examining applicability,

　　5)　and ensuring that the questions are understandable,

c.　evaluate the research methodology to ensure that the purpose of the study is being met: to identify variables which influence student teacher behavior in elementary school physical education classes,

d.　gauge the reaction of teachers to the observation and interview,

e.　test the feasibility of the interviewer role and data collection techniques, and

f.　gauge the time needed and number of stimulated recall incidents required to complete the interviews.

The Pilot Subjects

The subjects in the pilot study consisted of three professors employed in the Department of Movement Education at the University of Alberta. These three professors were selected because they were teaching activity courses related to elementary school physical education. Ideally student teachers would have been used for the pilot sample

but since there were none available in the field at the time of the pilot study, the movement education instructors were considered an adequate substitute.

Pilot Study Procedures

Each movement education instructor was observed for one activity class. The procedures outlined for the collection of field notes were followed. An interview, using the procedures outlined earlier in this chapter, was completed within twenty-four hours of the observation session.

Other techniques used to fulfill the objectives of the pilot study were (1) having interview experts analyze voice recordings and transcripts of the interview sessions, (2) asking each teacher and interview expert to complete a questionnaire covering subjects such as the interviewer, the interview and respondent honesty, (3) transcribing voice recordings and returning these to the teacher for verification, (4) questioning each teacher as to their perception of the suitability of the research procedures in gaining information on the influences on their teaching behavior, and (5) reviewing the information collected to ascertain whether it would fulfill the purposes of the study.

Pilot Results

The researcher felt very comfortable taking the field notes. The information gathered covered instructional techniques, class responses, management procedures, the behavior of the teacher and students, curriculum decisions and anecdotal notes of inferences made by the researcher. These were deemed appropriate by the reseacher and teachers because they adequately covered the lesson and the behavior of the teacher.

MacKay and Marland (1980:5) describe an interviewer as behaving like an "open, accepting counselor." Guba and Lincoln (1981:140) maintain that the most important characteristic for an interviewer is empathy. Tuckwell (1980b:7) stresses the importance of establishing a good rapport between the researcher and subject. The pilot study gave the researcher the opportunity to practice (1) getting aquainted with the atmosphere of an interview situation, (2) outlining the objectives of the study, (3) informing the teacher of the anonymity, confidentiality and non-evaluative nature of the interview and (4) asking

questions. By the end of the pilot study the researcher was comfortable in the interview situation.

The transcription of the first audiotape took almost four times as long as the length of the tape. By the time the researcher became familiar with the transcriber, the process was reduced to twice the length of the tape. The tape was transcribed directly into the computer to facilitate making copies of the transcript.

To establish objectivity, validity and reliability, interviewing experts were employed to analyze voice recordings and transcripts of the interview training sessions (see Appendix H). To further establish the objectivity, reliability and validity of the interview techniques, each pilot subject evaluated the questions, their responses and the interviewer through the use of the respondent questionniare previously described in the section on research rigor. The results of the questionnaires completed by both the interviewing experts and respondents indicated that all five aspects covered (respondent honesty, interviewer objectivity, question objectivity, reliability and validity) were acceptable.

Each respondent also checked the interview transcript to assess whether or not it represented the meaning that was intended. All the pilot subjects added a few variables to the transcript, particularly to the instances where they had been unable to recall the reasons for their behavior at the time of the interview. None of the interviewees deleted information while one rephrased parts of the transcript which seemed unclear. In no case did the changes alter the substantive content of the transcript.

The teachers felt that they had ample opportunity to express the variables which influenced their teaching behavior. A review of the information collected indicated that the teachers could recall and relate reasons for and influences on their behavior. The variables recorded covered a wide variety of areas. For these reasons, the data were ascertained as being suitable for fulfilling the purpose of the study.

When asked about their feelings regarding the interview procedures, the three teachers related that they felt comfortable with both the observation and the interview.

It was found that approximately twenty-five stimulated recall incidents were needed to fill an interview of twenty-five to forty-five minutes in duration. An interview

of that length seemed appropriate for both the interviewer and teacher. It was established that the techniques utilized in the pilot study were feasible for use in the main study.

Conclusions of the Pilot Study

The following conclusions were drawn from the results of the pilot study:

a. the interviewer was judged as trustworthy,

b. the objectivity, reliability and validity of the interview procedures and resulting data were established,

c. the interview data were verified as being appropriate for use in fulfilling the purpose of the main study, and

d. the feasibility of and procedures for interviewing were established.

G. Summary

This chapter presented the design of the study. The sample, instrumentation, data analysis and procedures undertaken to enhance the rigor of this research were described. The procedures used in a pilot study and its findings were also discussed.

IV. RESULTS

This chapter will describe the results of the data collection and analysis. The first section will describe the variables identified by the subjects while the second section will outline the categories developed from the list of variables. The third section will discuss each category, the variables to be contained in it and the percentage of occurrence of that category for each student teacher. The analysis will then be directed to how the student teachers ranked the variables in order of their importance. The chapter will end with a summary of the results of the content analysis, category development and survey.

A. Variables Identified

In the content analysis of the interview transcipts 2,559 reasons for or influences on student teacher behavior in elementary school physical education classes were found. These reasons or influences were placed in 543 units. A unit was previously defined as a remark(s) in which the subject attributes a reason for or influence on their behavior. These units and their frequencies of occurrence may be found in Appendix I.

The researcher placed the units which were logically related into larger groups under suitable headings. This reduced the number of variables to a more manageable number of 149. This list of variables (see Appendix J) was given to two independent analysts, familiar with the use of content analysis and category systems, for verification. These analysts were asked to check the variable list for sense in sorting: (1) to ensure those variables placed together in larger units fit under the same heading, (2) to change the descriptor of the larger grouping if needed, (3) to remove variables which did not fit in the larger units, and (4) to combine units or variables which seemed to be similar.

With the changes suggested by the two independent analysts the number of variables was further reduced to 93. This list of variables was returned to the same two analysts for confirmation. Further alterations reduced the list of variables to 77 (see Appendix K). This list was given to two recent Bachelor of Education graduates in elementary education and two doctoral students in educational administration for verification. These four people considered the list to be appropriate and did not think any changes needed to be made.

B. Category Development

The procedure to develop the categories was begun utilizing the 77 variables listed in Appendix K as the basis for the analysis. The 77 variables were put onto index cards in order to facilitate sorting them into categories. The same two independent analysts used to verify the list of variables were asked to sort the cards into large categories and to give each category a label. The primary researcher suggested 12 categories while the two independent analysts suggested 11 and 12 categories respectively. By combining elements of the three sets of categories 12 initial categories were developed (see Appendix L).

The independent analysts were then asked to sort the 77 variables into the 12 categories and describe why they placed the variables where they did. Using the suggestions and descriptions provided by the independent analysts the number of categories was reduced to 9 and definitions developed (see Appendix M).

To establish the objectivity and reliability of the categories the four resource people asked to verify the variable list plus one of the independent analysts involved in the development of the categories were asked to sort the 77 variables into the 9 categories. The results analyzed using a Scott's coefficient ranged from .72 to .91 with an average coefficient of .85 achieved. This result was considered acceptable because it surpassed the suggested minimum level of .70.

Intra-researcher objectivity and reliability was also calculated using the Scott's coefficient by having the researcher sort the variables into the categories on two separate occassions a week apart. A perfect correlation of 1.00 was recorded.

The categorization of the 77 variables into the nine categories outlined in Appendix N was accepted as being objective and reliable and was therefore used for the analysis of the data.

C. Analysis of Categories

In this section each category will be described. The variables contained in the category and their frequencies of occurrence will be outlined. An analysis of how frequently each subject stated that the category was influential in their choice of teaching

behaviors will be reported. The following list summarizes the range and frequency of occurrence of each category:

1. Planning, management and organization: 5.8% to 17.4% of all responses with an average of 12.9%. In one case it was the most frequently reported category.

2. Teacher's experiences: 3.3% to 11.63% of all responses with an average of 6.5%. In one case it was the least reported category.

3. Pupil response/behavior: 2.2% to 15.8% of all responses with an average of 9.5%. In one case it was the least reported category.

4. Environment: 4.4% to 13.7% of all responses with an average of 8.1%.

5. People who have a current and direct influence on student teacher behavior: 0% to 8.7% of all responses with an average of 3%. In eight cases it was the least reported category.

6. Instructional behavior: 3.4% to 27.35% of all responses with an average of 16.6%. In one case it was the least reported category and in two cases it was the most frequently reported.

7. Children's attitude, characteristics and experience: 3.4% to 11.63% of all reponses with an average of 7%. In one case it was the least reported category.

8. Teacher's ideas, beliefs and characteristics: 11.2% to 28.4% of all responses with an average of 16.9%. In three cases it was the most frequently reported category.

9. Characteristics and goals of the lesson/activity: 11.63% to 30.5% of all responses with an average of 19.5%. In five cases it was the most frequently reported category.

Planning, Management and Organization

The category planning, management and organization included teacher behaviors and decisions related to classroom management, organization and the planning of lessons. The following variables were included in this category:

a. organization

b. safety

c. amount of structure the teacher desired for the learning environment

d. efficient use of time

e. workability of the activity/lesson plan

f. classroom management

g. teacher's decision

h. care of equipment

i. need to adapt lesson plan

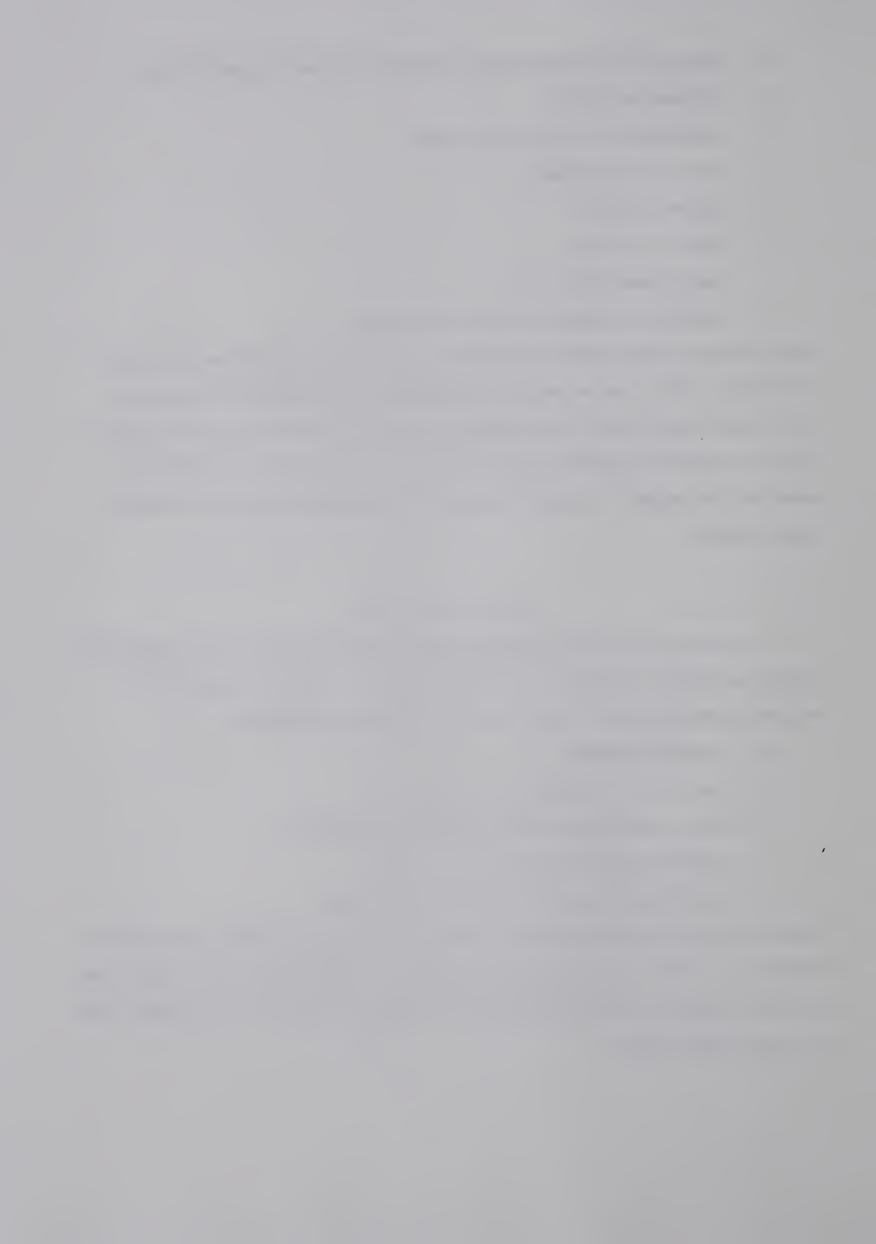j. teacher's awareness of what was occurring

The proportion of tallies falling in this category for individual student teachers ranged from 5.8% to 17.4% of all the reported influences on teacher behavior. The average proportion of tallies falling in this category was 12.9% of all responses. This category was more frequently reported as being influential on teacher behavior in elementary school physical education classes than any other single category by one of the eleven student teachers.

Teacher's Experiences

"Teacher's experiences" included all those things the teacher has encountered, has experienced, that have happened to the teacher, and that they have done which has influenced their behavior. The variables included in this category were:

a. university education

b. other experiences prior to student teaching

c. people who have been role models for the teacher

d. teacher's previous experiences with activity

e. teacher's previous experiences with the children

Individual student teachers reported this category from 3.3% to 11.63% of all reported influences on teacher behavior. The total proportion of tallies falling in this category was 6.5% of all responses. One student teacher had less tallies recorded in this category then any other single category.

Pupil Response/Behavior

Pupil response/behavior included all the student's responses or behavior which occurred during the lesson. The following variables were included in this category:

a.   children's lack of disruptive behavior

b.   children copying

c.   children decided

d.   children's response

e.   children giving appropriate response

f.   children not giving expected/appropriate response

g.   children needed help/were having problems

h.   children's completion of the activity
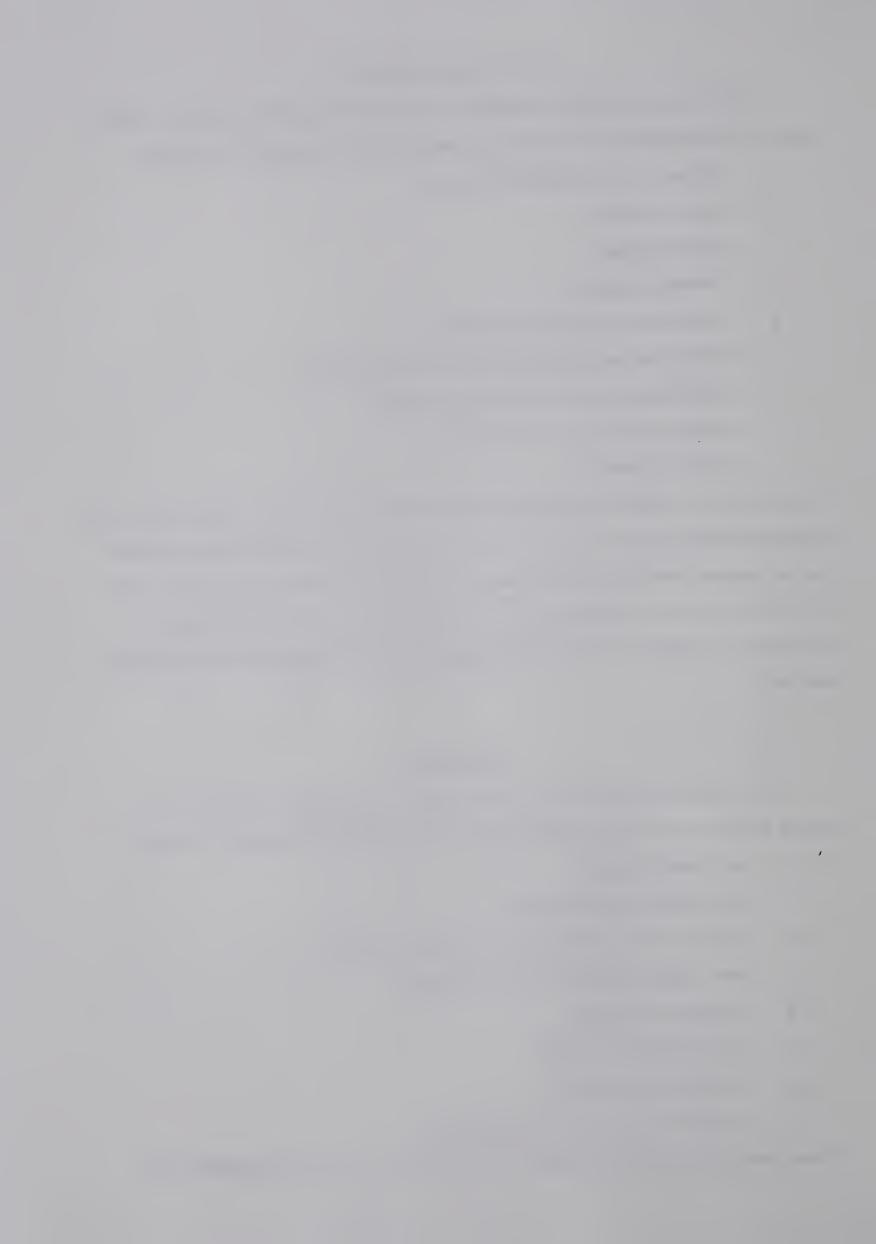
i.   children's behavior

The proportion of tallies for individual student teachers ranged from 2.2% to 15.8% of all responses in this category. This category was reported as being influential on student teacher behavior in elementary school physical education classes a total of 9.5% of all reported influences on teacher behavior. The category pupil response/behavior was recorded less frequently than any other single category for one of the eleven student teachers.

Environment

Environment included all those factors which surround the situation, ie., the teacher cannot control these variables. The variables falling in this category included:

a.   equipment availability

b.   extra-classroom influences

c.   classroom routine set up prior to student teaching

d.   other issues impinging on the environment

e.   the gym environment

f.   limited time/time available

g.   numbers/size of group

h.   no control over equipment organization

Student teachers reported this category from 4.4% to 13.7% of all responses. The

proportion of tallies recorded in this category for all student teachers was 8.1% of all reported influences on teacher behavior. The frequency of this category was neither the greatest nor the least recorded of the nine categories for any of the student teachers.

People Who Have a Current and Direct Influence on Student Teacher Behavior

This category included all those persons who were interacting with the student teacher (not including the children) during the practicum experience. The following variables were included in this category:
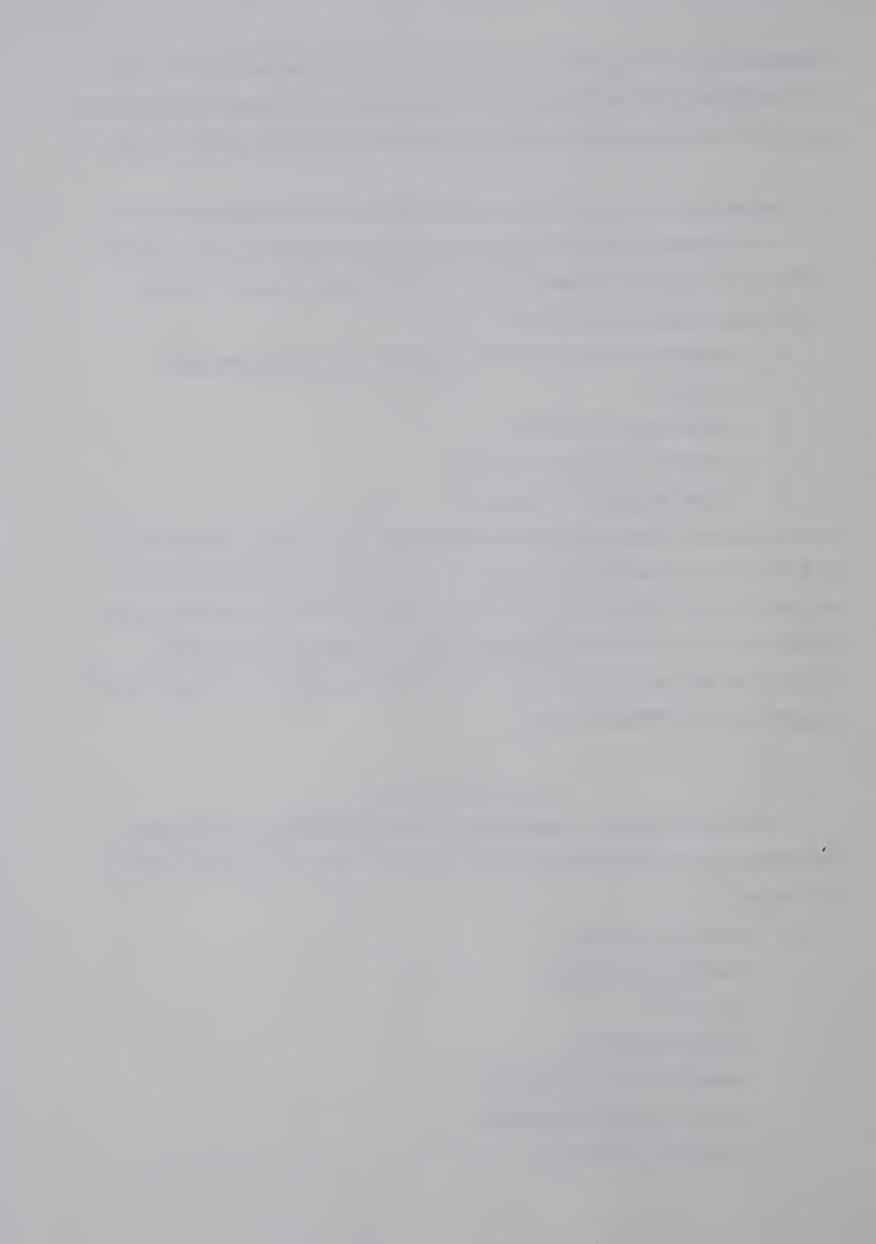
a. cooperating teacher's position in regards to evaluating the education practicum

b. people observing me teach

c. movement supervisor suggested it

d. cooperating teacher's suggestion

The proportion of tallies for individual student teachers in this category ranged from 0% to 8.7% of all responses. One student teacher never reported this category as being influential on his/her behavior. The proportion of tallies recorded for all subjects in this category was 3% of all reported influences. Eight of the eleven student teachers attributed the reasons for or influences on their teaching behavior less frequently to this category than any other single category.

Instructional Behavior

"Instructional behavior" included those behaviors the teacher uses during the instructional period, things the teacher does with or to students. The variables falling in this category were:

a. giving reinforcement

b. teacher giving feedback

c. use of cues

d. giving an explanation

e. teacher extending performance

f. teacher focusing performance

g. giving aid to the children

h.   use of observation

i.   giving a review

j.   teacher motivating children

k.   setting an example for the children

The range of proportion of tallies for individual subjects in this category was 3.4% to 27.35% of all recorded influences. The total proportion of tallies falling in this category was 16.6% of all reported influences on student teacher behavior. While one of the student teachers reported this category as being influential on their teaching behavior less frequently than any other single category, two student teachers recorded it more frequently than any other single category.

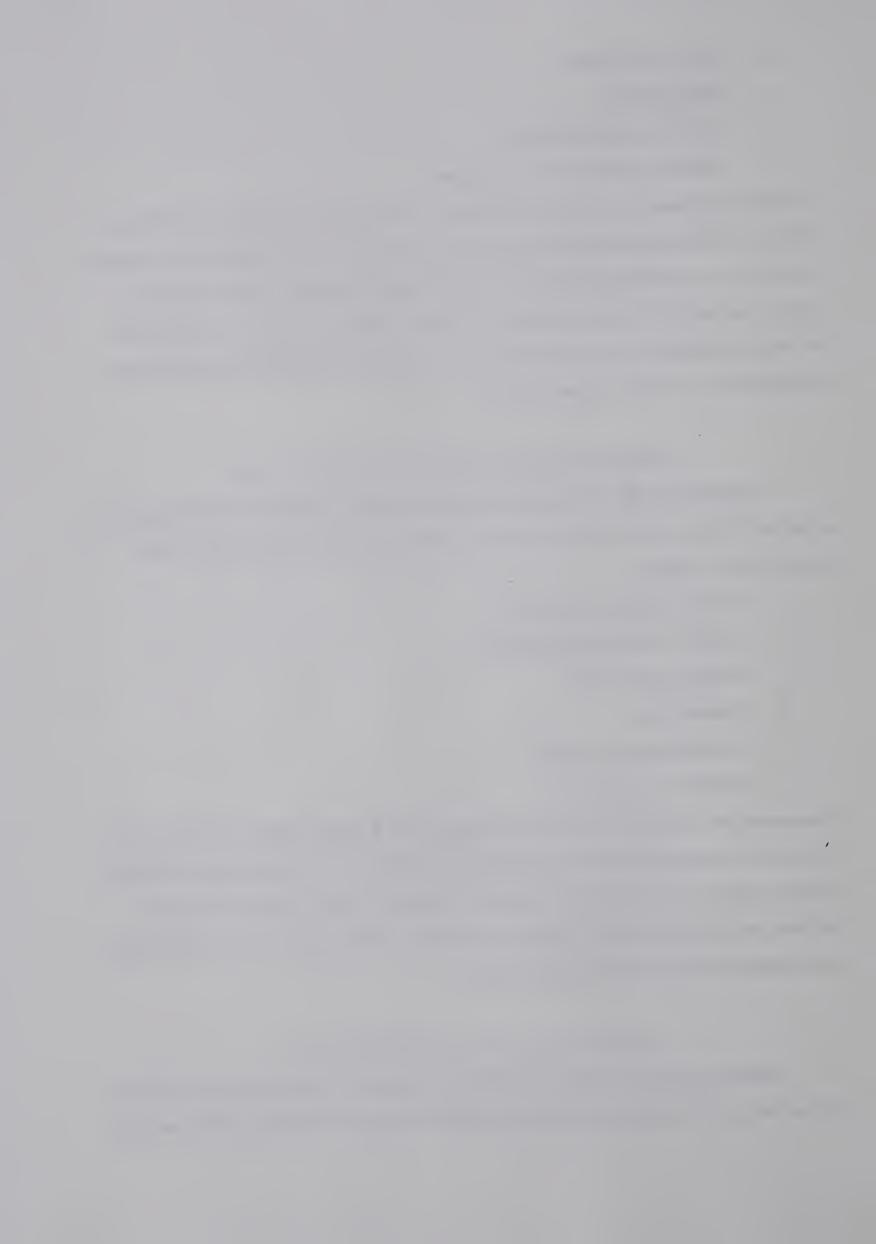### Children's Attitude, Characteristics and Experience

Children's attitudes, characteristics and experience included all those things with which the children come to the instructional situation. The following variables were included in this category:

a.   children's physical capabilities

b.   children's level and experience

c.   children's work habits

d.   children's era

e.   children's emotional status

f.   children's energy level

The proportion of tallies in this category ranged from 3.4% to 11.63% of all responses for individual student teachers. The proportion of tallies for all subjects recorded in this category was 7% of all reported influences on teacher behavior. One of the student teachers recorded this category as being influential on their choice of teaching behavior less frequently than any·other single category.

Teacher's Ideas, Beliefs and Characteristics

Teacher's ideas, beliefs and characteristics included all those attitudes, attributes, philosophies and expectations concerning herself/himself, the children and the learning

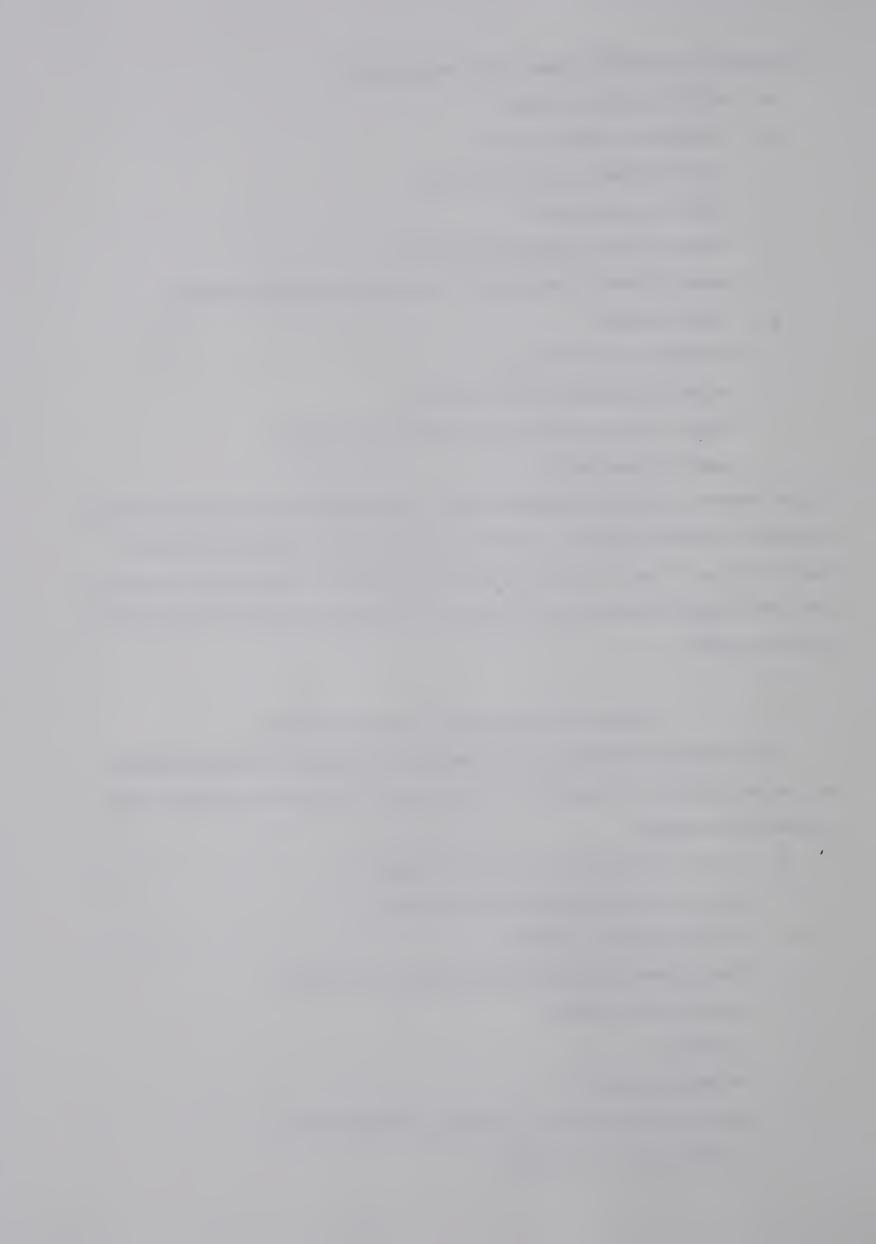environment. The variables included in this category were:

    a.   emotional status of teacher

    b.   spontaneous teacher behavior

    c.   teacher's beliefs concerning children

    d.   teacher's physical status

    e.   teacher's desires, personal preferences

    f.   teacher's belief that the material is important for children to know

    g.   teacher's abilities

    h.   projected needs of children

    i.   teacher's ideas, beliefs and philosophy

    j.   negative concerns regarding my teaching performance

    k.   teacher's expectations

Student teachers reported this category from 11.2% to 28.4% of all responses. The total proportion of tallies falling in this category was 16.9% of the reported influences on teacher behavior. Three of the student teachers reported this category more frequently than other categories as being influential on their teaching in elementary school physical education classes.

Characteristics and Goals of the Lesson/Activity

        This category included the goals, objectives or purposes of the activity/lesson and the characteristics or aspects of the activity/lesson. The following variables were included in this category:

    a.   material less confusing/children can manage it

    b.   to promote student togetherness as a group

    c.   affective goals for children

    d.   the equipment/stimulus was appropriate for the activity

    e.   acclimatize the children

    f.   warmdown

    g.   introductory activity

    h.   amount of physical activity involved in the lesson/activity

    i.   characteristics of the activity

j.   sequence and progression of material

k.   significance of the lesson material

l.   lesson theme/objective

m.   gives the children the opportunity to make decisions/be creative

The proportion of tallies falling in this category for individual student teachers ranged from 11.63% to 30.5% of all responses. The proportion of tallies falling in this category for all subjects was 19.5% of all the reported influences on student teacher behavior. Five of the eleven student teachers reported this category more frequently than any other category.

Influences on Individual Student Teacher's Behavior

The student teacher who reported "planning, management and organization" more frequently than any other single category was student teaching in a grade 5 classroom with students who had been classed or labelled as having behavior problems throughout their school years. The student teacher appeared to be a shy, softspoken person who was inexperienced with this type of group. She rarely completed the planned lesson content because most of the lesson was apparently spent trying to control the students. The only lesson with no apparent discipline problems was one where the children played a self-managed game of floor hockey. The categories "pupil response/behavior" and "environment" were recorded with the second greatest frequency for this teacher. "Instructional behavior" was recorded less frequently than any other single category for this student teacher.

A second student teacher reported "teacher's experience" along with "people who have a current and direct influence on student teacher behavior" less frequently than any of the other seven categories. This student teacher was assigned a grade 4 class in a traditional school. She had no training or experience in movement education or physical education and expressed discomfort with the teaching of this segment of the curriculum. Her plans for instruction were "textbook" lessons from curriculum guides and other resource materials. This teacher recorded "characteristics and goals of the lesson/activity" more frequently than any other single category.

A third student teacher, who reported the category "pupil response/behavior" less frequently than any other single category, was a secondary education student with some training in secondary school physical education. He had no training in movement education and this was his first exposure to this age group. He appeared to be able to apply suggestions made by his cooperating teacher, the movement education supervisor, his faculty consultant and a friend with an extensive background in movement education who helped him plan his lessons, appropriately and within a relatively short period of time. This student teacher recorded the category "characteristics and goals of the lesson/activity more frequently than any other single category.

The two student teachers who recorded the category "instructional behavior" more frequently than any other single category were both teaching grade 1 classes in a low socio-economic status inner city community school. Neither of the student teachers had ever reportedly encountered this type of teaching experience. They had completed 3 and 6 movement education courses respectively. They both recorded "people who have a current and direct influence on student teacher behavior" less frequently than any other single category.

The student teacher who reported "children's attitude, characteristics and experience" less frequently than any other category as being influential on her behavior was teaching a grade 4 class in a traditional school located in a high socio-economic community. She and her cooperating teacher apparently had differing views on an appropriate physical education curriculum for grade 4 children. This student teacher reported "people who have a current and direct influence on student teacher behavior" more frequently than any other student teacher. The category "teacher's ideas, beliefs and characteristics" was recorded more frequently than any other single category for this teacher.

Two other student teachers also recorded "teacher's ideas, beliefs and characteristics" more frequently than any other single category. These two teachers had an almost identical ranking by proportion of the nine categories: only the 6th and 7th rankings were reversed. Both teachers appeared very confident in their ability and seemed to have complete control of their grade 1 classes. Both had taken 2 activity courses in movement education and expressed definite preferences for certain

curriculum areas. Both student teachers rarely referred to their cooperating teachers and reported the category "people who have a current and direct influence on student teacher behavior" less than any of the other eight categories, as a matter of fact, one of these student teachers never reported it at all.

Three of the student teachers who reported "characteristics and goals of the lesson/activity" more frequently than any other single category were involved with the Children's Movement Education Program sponsored by the Department of Movement Education at the University of Alberta. The three student teachers had taken 3, 4 and 5 movement education activity courses respectively. Two of the three student teachers were completing their practicums in kindergartens while the third was teaching in a grade 4 classroom. All three student teachers recorded "pupil response/behavior," "instructional behavior" and "teacher's ideas, beliefs and characteristics" in one of the 2nd, 3rd and 4th ranked positions, while they all reported "people who have a current and direct influence on student teacher behavior" less frequently than any other single category.

In the researcher's opinion, and on the basis of the observations both in the gymnasium and in the interview sessions, there appeared to be no significant differences in the teaching actions or responses that could be attributed to the gender of the respondents. Each respondent appeared unique.

D. Ranking of Variables

On the basis of the proportion of tallies falling in each category the nine categories were ranked as follows:

1. characteristics and goals of the lesson/activity (19.5%)
2. teacher's ideas, beliefs and characteristics (16.9%)
3. instructional behavior (16.6%)
4. planning, management and organization (12.9%)
5. pupil response/behavior (9.5%)
6. environment (8.1%)
7. children's attitude, characteristics and experiences (7%)
8. teacher's experiences (6.5%)
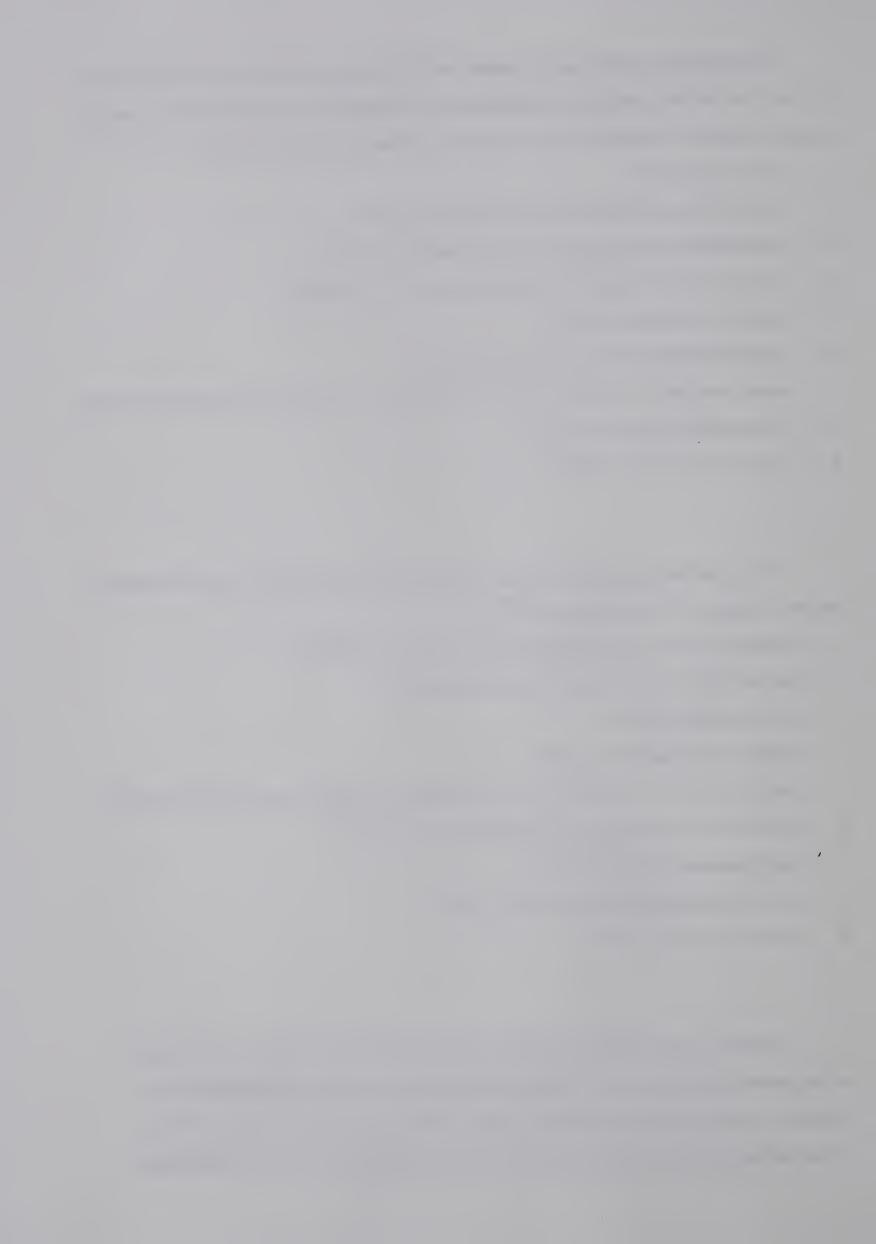9. people who have a current and direct influence on student teacher behavior (3%)

The responses of the eleven student teachers to the question asking them to list and rank the ten most important variables which influenced their teaching behavior can be found in Appendix O. Using this information the following ranking resulted:

1.   environment (20%)

2.   teacher's ideas, beliefs and characteristics (17.27%)

3.   characteristics and goals of the lesson/activity (15.45%)

4.   children's attitudes, characteristics and experience (13.64%)

5.   teacher's experiences (10%)

6.   planning, management and organization (9.1%)

7.   people who have a current and direct influence on student teacher behavior (8.18%)

8.   pupil response/behavior (4.54%)

9.   instructional behavior (1.82%)

When just the top three variables listed by the student teachers were considered the nine categories were ranked as follows:

1.   children's attitudes, characteristics and experience (33.33%)

2.   teacher's ideas, beliefs and characteristics (24.24%)

3.   environment (15.15%)

4.   teacher's experiences (12.12%)

5.   people who have a current and direct influence on student teacher behavior (9.1%)

6.   characteristics and goals of the lesson/activity (3.03%)

7.   pupil response/behavior (3.03%)

8.   planning, management and organization (0%)

9.   instructional behavior (0%)

All eleven of the student teachers listed the children's attitudes, characteristics and experience in the top three variables which influenced their teaching behavior in elementary school physical education classes. Both characteristics and goals of the lesson/activity and pupil response/behavior were mentioned once while instructional

behavior and planning, management and organization were never listed in the top three variables.

E. Summary

This chapter has outlined the process used to combine 543 variables into 77 variables and the development of the nine categories. An average Scott's coefficient of .85 was achieved to establish inter-researcher objectivity and reliability while a perfect correlation of 1.00 was recorded when the intra-researcher calculations were done. The categorization of the 77 variables into the nine categories was therefore accepted as objective and reliable.

The last three sections of this chapter described the categories, their definitions, the variables which were included in each category and the proportion of tallies falling in each category. The use of the nine categories by individual student teachers was reported. A description of the eleven teachers, including their background and the setting in which their education practicum took place, was presented. The ranking of categories based on the proportions of tallies and then ranked on the student teachers' perceptions was outlined. The only variable reported by all eleven student teachers as being among the top three variables which influenced their teaching behavior in elementary school physical education classes was the children's attitudes, characteristics and experience. A discussion of these results will be presented in the next chapter.

V. DISCUSSION

The first part of this chapter will focus on an interpretation and discussion of the results from the researcher's perspective. The second half of the chapter will turn to the original frame of reference proposed in the second chapter and review other recent research on teacher behavior as a means of discussing the results reported in the preceding chapter and the researcher's interpretation of them.

A. Interpretation of the Results

This section of the chapter will discuss five major areas: (1) the variables identified, (2) the categories developed, (3) the influences on individual student teachers, (4) the layering of responses and (5) the different variables influencing the student teacher during the interactive and non-interactive phases of the teaching process.

Variables Identified

The large number of variables identified, 543 units, indicated the complexity of teacher behavior. The units ranged from specific responses such as "Tom forgot his shoes," to philosophic beliefs such as "children need to be creative," to pragmatic concerns such as "school procedures and policy," to emotional responses such as "I was angry." The student teachers reported a myriad of influences on their teaching behavior. The list of variables was never exhausted as even the last two student teachers interviewed added 35 and 41 units respectively to the list comprised of all reported influences on teacher behavior. In spite of this, the kinds of responses did begin to fall into patterns. The results indicated that there were complex interactions and patterns involved in teacher behavior. These interactions and patterns will be discussed later in this section.

The results indicated that no single aspect of the teaching process is sufficient to explain the intricate problem of influences on student teacher behavior. The research trying to examine this phenomenon must be based on several perspectives. The following aspects of the process must be considered to give a more complete

picture of the influences on teacher behavior:

a.   the characteristics of the teacher,

b.   the characteristics of the student,

c.   the characteristics of the curriculum content,

d.   the environment or setting in which the interaction occurs,

e.   the behavior of the teacher,

f.   the behavior of the students,

g.   the interactive thought processes of the teacher, and

h.   the non-interactive thought processes of the teacher.

Variables related to each of these aspects of the teaching process were identified by all the student teachers as being influential on their choices of teaching behavior. To examine one aspect while excluding the others gives a one-sided perspective to the problem.

The fact that the student teachers identified and related reasons for and influences on their behavior indicated that student teachers do make decisions regarding their behavior which is conscious. Student teachers seem to make purposive decisions they can justify and explain. This suggests a fruitful avenue of research based on introspective techniques.

Categories Developed

Although a wide array of variables was identified by the student teachers as being influential on their teaching behavior, these could be placed into a workable category system. The categories developed in the study were grounded in the data rather than being developed prior to the data collection. This type of framework has the advantage of giving a wider perspective and a more naturalistic representation of the phenomenon.

Because the reported influences on student teacher behavior could be represented in a single category system, it would seem that research on teaching can be carried out successfully by viewing the problem from an inclusive perspective rather than focusing on a single aspect of the phenomenon. This would have the advantage of putting the various components of teacher behavior into a wider perspective. The use of a multidimensional system may enable research on teacher behavior to attain more

conclusive results because it would be better able to deal with the complex relationships involved in teacher behavior.

Influences on Individual Student Teachers

There was no one common element which could be associated with all the student teachers. The kind of class they were teaching, the kind of school they were in, the cooperating teacher, their movement education training, their previous teaching experience and their confidence seemed to differentially influence the student teachers.

Five of the eleven student teachers reported "characteristics and goals of the lesson/activity" more frequently than any other category as influencing their teaching behavior. Three of the student teachers reported "teacher's ideas, beliefs and characteristics" as being the most influential category while two student teachers recorded "instructional behavior" most frequently. The eleventh student teacher reported "planning, management and organization" as the most influential variable. Seven of the eleven student teachers recorded "people who have a current and direct influence on student teacher behavior" less frequently than any other single category, while one student teacher recorded this category and "teacher's experience" less. The remaining three student teachers recorded different categories as being the least influential on their teaching behavior: one reporting "pupil reponse/behavior," another "instructional behavior," and the third "children's attitude, characteristics and experiences." There seems to be some consistency in the reporting of the most frequently and least frequently identified categories but none in the intermediate ones.

The only common element was that the variable "children's level and experience" was reported by all eleven student teachers as being among the top three variables which influenced their teaching behavior.

Although the categories developed can account for all the variables reported by the student teachers as influencing their teaching behavior, there was no basis for making generalizations regarding the use of the categories by individual student teachers. The practicum setting, student teacher's personality, background, the children etc., appeared to differentially influence individual student teachers. The student teachers appeared unique in the reporting of influences on their behavior.

Layering of Responses

The layering of responses refers to the immediacy of recall of the influences on the student teacher's behavior. Those variables mentioned first were more closely related to the observed teaching event. When the student teachers were asked why they behaved as they did, their initial responses were seemingly more related to aspects of the interactive teaching event rather than other aspects of the teaching process. Variables such as pupil responses, instructional behaviors, organization and the immediate setting were reported first. When asked if anything else influenced the specific behavior observed, there was a tendency to express reasons and influences related to characteristics of the lesson content, the emotional status of the teacher and the characteristics of the student or teacher. Usually the past experiences of the teacher, including their university education, were only reported as an afterthought and were not directly related to one specific observed behavior. Teacher's beliefs were reported throughout the interview.

There appeared to be an immediacy effect operating where variables associated with the event were reported first, variables relating to factors prior to the event but still associated with it second, and variables which were not directly related to the behavior in question reported last. In most cases, there was more than one influence or reason provided for a specific behavior. In a number of cases, after reporting a series of influences, the student teacher would say: "that's enough for that one." The variables which influenced a single teaching behavior appeared to be layered according to how direct a relationship the variable had to the behavior observed.

Variables Influencing Different Phases of the Teaching Process

The three rankings of variables based on (1) proportions of tallies, (2) the listing and ranking of variables by the student teachers and (3) the top three variables influencing behavior as perceived by the student teachers, provided interesting information. The ranking based on proportions of tallies appeared to be related to the interactive phase of teaching. This may be due to the practice of conducting interviews immediately after the gymnasium session and because the incidents used to stimulate the recall of the student teacher were drawn directly from the interactive teaching phase. The ranking based on

the information provided by the student teachers' perceptions of the ten most influential variables on their teaching behavior seemed to be related more to the non-interactive phase as the student teachers had a chance to reflect on their responses without being influenced by the recall events or by the proximity of the actual lesson. The ranking based on the top three variables represented the perceptions of the student teachers which seemed congruent with their personal beliefs concerning what variables should be the most influential on their teaching behavior.

The only category which maintained its second position in all three rankings was "teacher's ideas, beliefs and characteristics." It appeared that this category was influential during all phases of the teaching process as well as being important from the perspective of the student teachers. "Planning, management and organization" and "characteristics and goals of the lesson/activity" dropped from a high ranking for the interactive phase, to a mid position for the non-interactive phase and to a low position when considered from the teachers' perspective. "Teacher's experience," "people who have a current and direct influence on student teacher behavior" and "childrens' attitude, characteristics and experiences" all moved from a low ranking in the interactive phase, to a mid position for the non-interactive phase and to a high ranking when gauged from a personal frame of reference. "Pupil response/behavior" and "instructional behavior" dropped from a high position in the interactive phase to a low postion when considering the personal perspective and also during the non-interactive phase of the teaching process. The "environment" moved from a low position in the interactive phase, to the top ranking in the non-interactive phase and back to a mid position as rated from the perspective of the student teachers.

The ranking of the variables suggested that the primary influences on the interactive phase were not the same as those during the non-interactive phase or from the perspective of the student teacher. This suggests that when examining influences on teacher behavior, covert thoughts during the interactive phase of teaching are inadequate to identify and understand all the variables which influence teacher behavior. Non-interactive thoughts must also be examined.

B. The Research Findings and Recent Literature

This section will discuss the findings presented in the first part of this chapter in relation to recent research on teacher behavior. Each segment will state the finding, present the recent research related to it and then will present a comparison between the two.

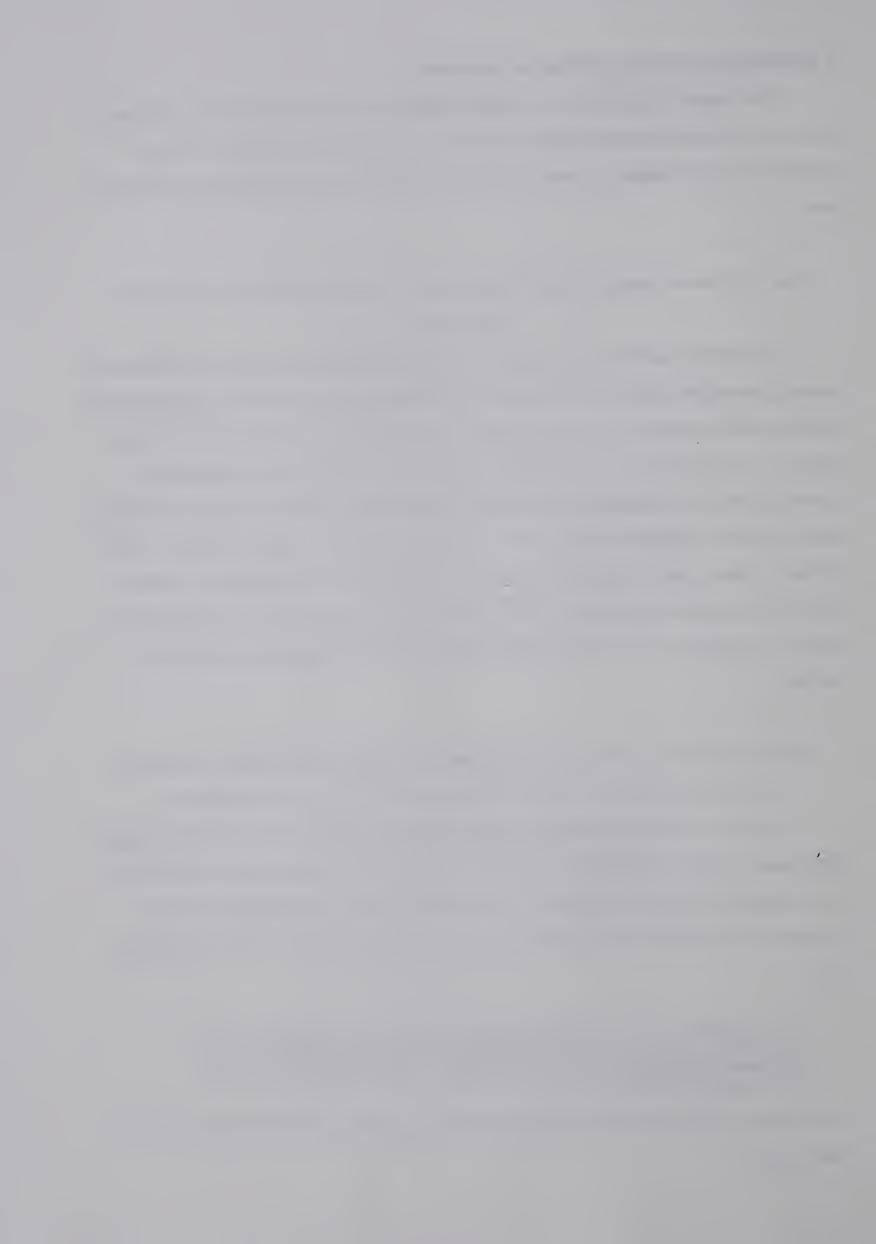*Student teachers make decisions regarding their behavior which can be recalled and related.*

The student teachers were aware of why they behaved the way they did and were seemingly willing to relate those variables to the researcher. In only a few cases were the student teachers unable or unwilling to pinpoint the reason for or the influence on their behavior. The results of the introspective techniques used in this study indicated that student teachers do make decisions regarding their behavior which they attempt to recall, relate and justify. Marland (1977), Conners (1978a), Tuckwell (1980a), Wodlinger (1980) and many others cited in Clark's and Yinger's (1977) review of the research on teacher thinking have used introspective techniques based on the assumption that people make decisions. The results of all these studies indicated that this underlying assumption is justified.

Teacher behavior is a complex phenomenon which no single variable can explain; therefore, research on teaching must be based on multiple perspectives.

Conners (1978a:302) states that teacher behavior is a complex and many-faceted phenomenon. Fedigan (1980:39) concludes at the end of his review of the literature, that future research should be "designed to explore the complex relationships of all the variables which make up the classroom system." Shulman and Lanier (1977:45) propose that,

> ...the complexities of the teaching process are of such magnitude that no single form of inquiry can suffice. What is needed is a purposeful and disciplined eclecticism that brings together multiple perspectives on the phenomena of teaching.

The concensus appears to be that teacher behavior is complicated and involves intricate relationships.

The results of this research support this contention. The large number of variables reported, the multiple influences on a single behavior, the unique nature of each student teacher and the breadth of the categories covering both the interactive and the non-interactive phases of teaching indicates a need for research based on multiple perspectives.

A workable category system can be developed which is refined enough to be meaningful. ,

The following researchers identified variables which influenced teacher behavior. The variables will be reported and a discussion of how they compared to the variables identified in this research will be presented.

1.   Taylor (1970, cited in Clark & Yinger, 1977:281-282) reports these influences on teacher behavior:

   a.   the student's needs, abilities and interests,

   b.   the aims and goals of the subject matter,

   c.   teaching methods,

   d.   aims and objectives,

   e.   evaluation, and

   f.   context.

All of the variables in Taylor's research were associated with the preactive phase of teaching.

   Taylor identified "evaluation" as a variable which influenced teacher behavior. "Evaluation" was not developed as a separate category in this research. This may be because the study setting was an elementary school physical education class where there appears to be less formal evaluation of students than in a regular classroom. The student teachers did report observing and assessing the pupils' understanding and responses during the interactive phase. This was recorded as an "instructional behavior" which could be viewed as an evaluative process.

2.   Shavelson (1980), Shavelson and Borko (1979) and Borko, Cone, Russo and

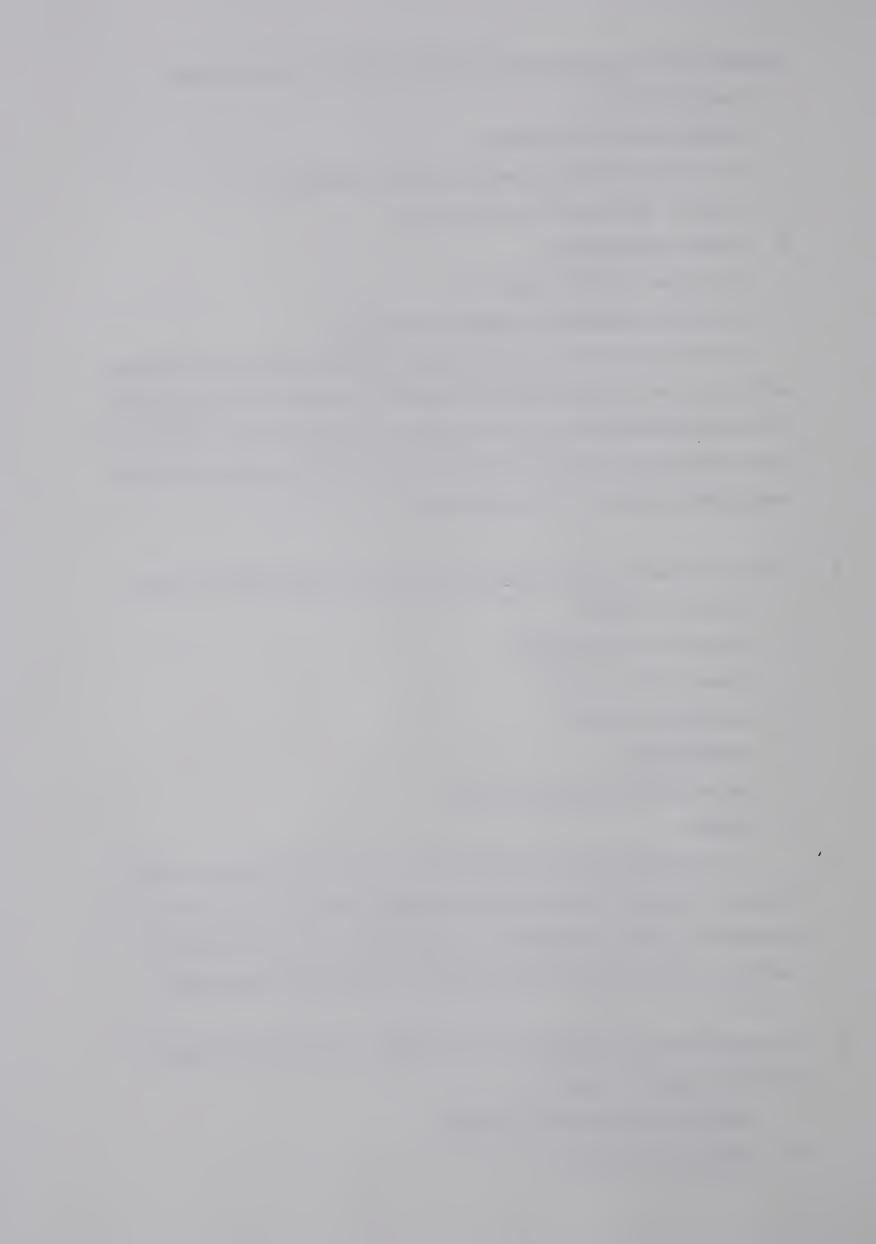Shavelson (1979) proposed these influences on teacher decision making:

a. nature of the task,

b. teacher's beliefs and attitudes,

c. information concerning characteristics of the students,

d. facilities, resources, school policies, etc.,

e. teacher characteristics,

f. knowledge of subject matter, and

g. availability of alternative strategies and materials.

Borko et al. (1979) report the variable "availability of alternative strategies and materials" as influential on teacher behavior. This variable could be accounted for in the study categories if it is subdivided. "Alternative strategies available" could then be placed under "teacher characteristics" and "alternative materials" could be categorized as a aspect of the "environment."

3. Conners (1978a:302) outlines seven variables which influence teacher behavior:

a. instructional tactics,

b. awareness of pupil behavior,

c. characteristics of pupils,

d. beliefs about students,

e. self-awareness,

f. lessons objectives and content, and

g. feelings.

Conners reports "self-awareness" as a variable which influences teacher behavior. In this study, self-awareness was categorized within one of the larger categories of "planning, management and organization." All the other variables mentioned by Conners could be accounted for in the categories developed.

4. Tuckwell (1980a:231-238) reports eleven variables which influence teacher's interactive thought processes:

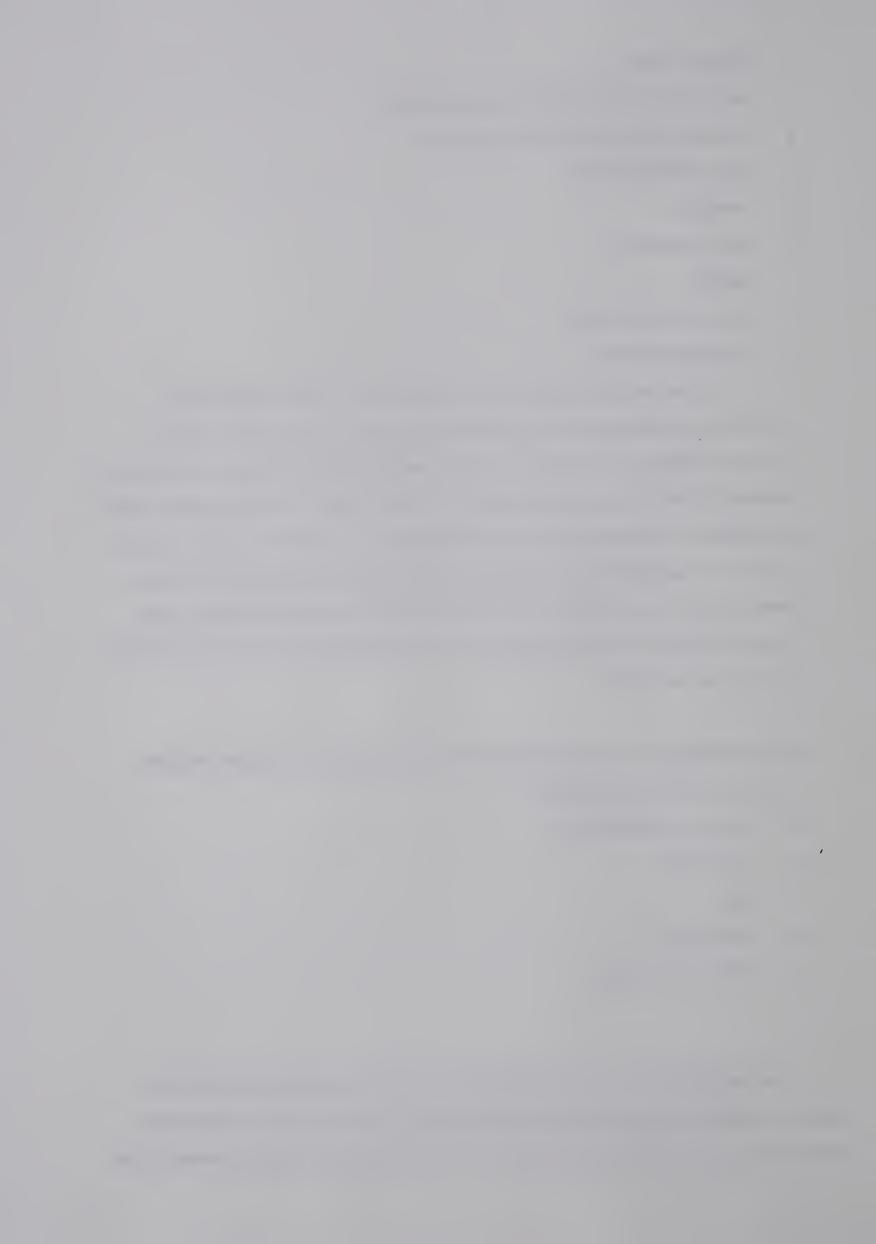a. instructional techniques and strategies,

b. management and control,

c.   lesson content,

d.   perceptions of the classroom environment,

e.   inferences made from the perceptions,

f.   pupil characteristics,

g.   feelings,

h.   self-awareness,

i.   beliefs,

j.   non-task related, and

k.   ecological factors.

The only variable suggested by Tuckwell which was not specifically recognized in the categories developed in this study, was "non-task related." Gurwitsch (1964:414) concludes from his research that if thoughts do not have any relevance to the teaching process, they fall in the "margin of consciousness" which is a domain of irrelevancy and mere co-presence. The reason this variable did not occur in this research may be because student teachers in this study were only asked to report those variables which influenced the observed behavior, while Tuckwell (1980a) asked the teachers to report what they were thinking at the time of the observed incident.

5.   Oliver and Taylor (1980:16) concluded from their research that these variables influenced instructional behavior:

a.   personal characteristics,

b.   knowledge,

c.   skill,

d.   attitude, and

e.   classroom ecology

The variable most frequently omitted from the models identified in the initial review of models of teacher behavior (see Appendix A) was the nature of the lesson content. This appears to be characteristic of the earlier process-product research. One

variable consistently identified in these models was "pupil outcomes." As a variable "pupil outcomes," other than observable responses categorized as "pupil response/behavior," was not reported by the student teachers in this study as influencing their behavior except from a "goal-setting" perspective. When student teachers reported an expected outcome as influencing their behavior, it was recorded as "characteristics and goals of the lesson/activity." If they identified a pupil reponse as an influential variable, it was recorded as "pupil response/behavior."

One category which was developed in this research but was not found in the literature was "people who had a current and direct influence on student teacher behavior." This may be because the subjects of this inquiry were student teachers who had cooperating teachers, supervisors and faculty consultants constantly in attendance while full-time classroom teachers may not encounter people who have a similar direct influence on their teaching behavior.
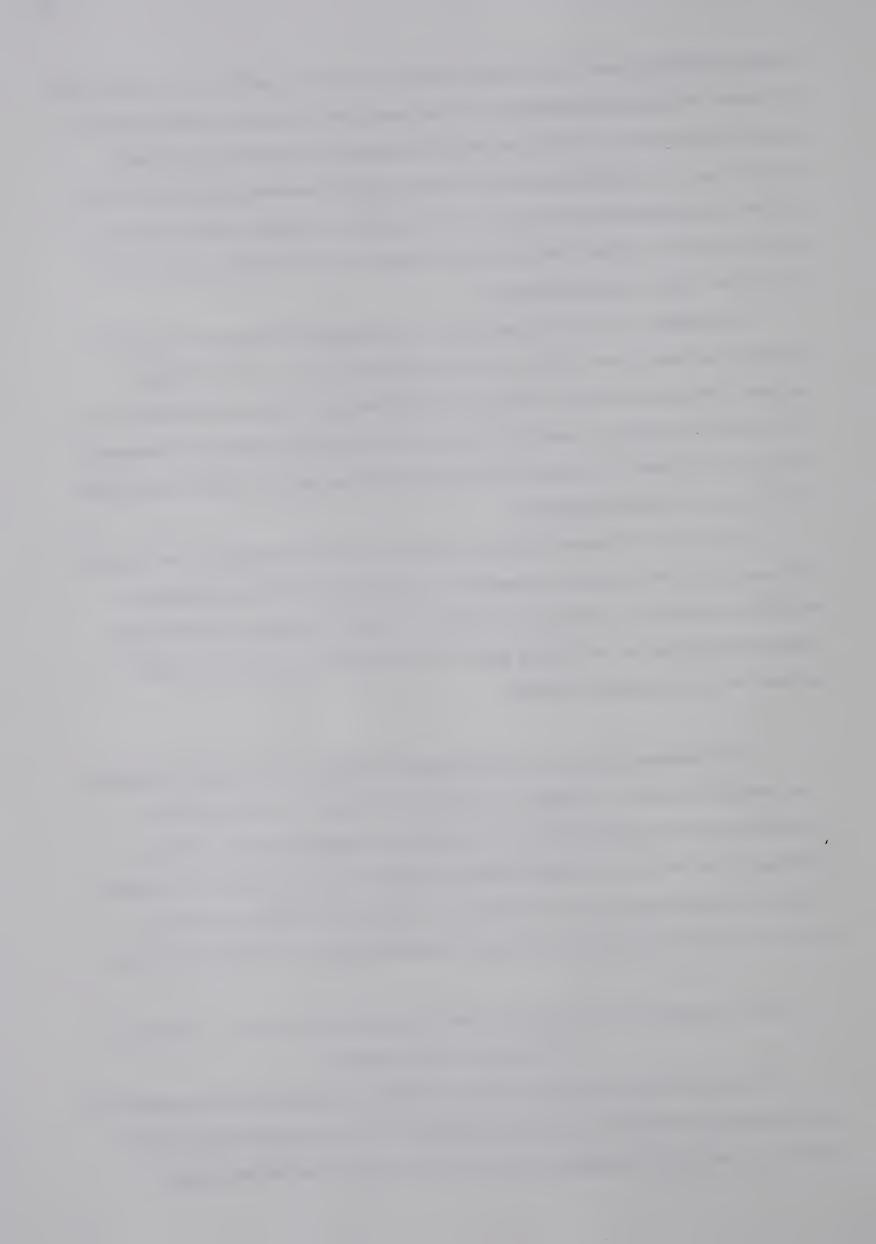
The frame of reference originally proposed in the second chapter was found, in retrospect, to be too broad in its categories to be useful. Its utility however lay in allowing the researcher to define the problem and select the research methodology. Although the categories were too broad for the analysis, they did provide a wide perspective on the research problem.

The categories developed in this research were grounded in the data and appear to be relatively inclusive. The category system could account for all the variables reported by the student teachers as influencing their behavior and those variables identified in the literature on teacher behavior. It appears that the categories cover the scope of the teaching process and therefore may have some utility in providing a perspective for further research on teacher behavior based on multiple perspectives.

There is no basis for making generalizations regarding the use of the categories by individual student teachers.

Duffy (1977, cited in Clark & Yinger, 1977:296) concludes from his research that teachers are not consistent in their instructional practices. He suggests that teachers' beliefs are mediated by variables such as resources, peer influences and student
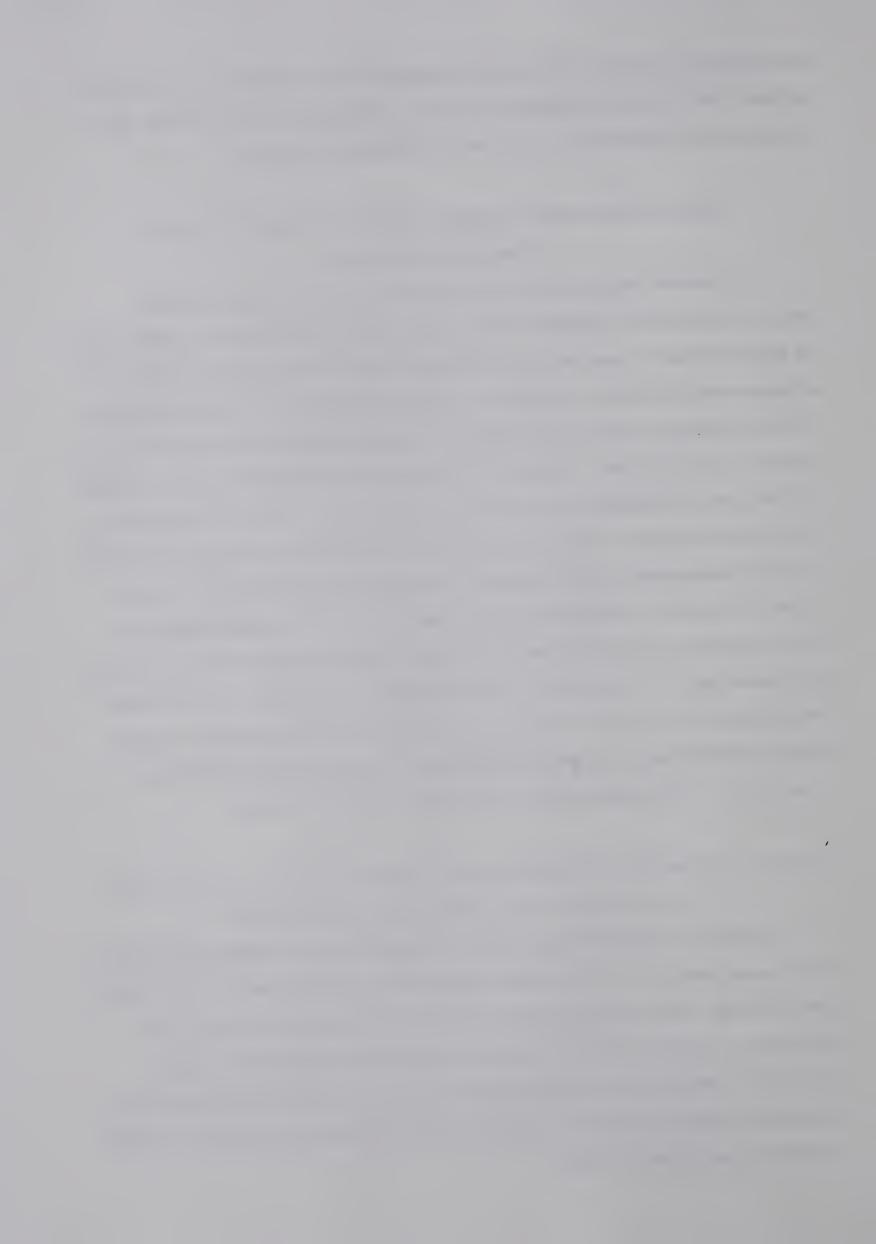
characteristics. The results of this research support Duffy's conclusion. The myriad of variables, which may be combined in numerous ways, suggests that the teacher, the setting and the particular time, should be accorded some uniqueness.

More than one variable is usually reported as influencing a single student teacher behavior.

As previously noted, the variables reported as influencing student teacher behavior appeared to be recalled in order of how direct a relationship the variable had to the specific behavior observed. Brophy (1979:23) supports this multiplicity of influential variables when explaining the reasons for specific teaching behaviors. Bronfenbrenner (1979:3) agrees that variables which influence a specific teacher behavior go beyond the immediate setting. Gurwitsch (1964:2-3), in his field of consciousness theory, contends that the human mind attends to more than one thing at a time. There are many variables which influence behavior which are retained as "co-present data." Although such data do not occur simultaneously with the decision to undertake a specific behavior, they still influence it. Gurwitsch (1964:3) states that, "every act of consciousness occurs at a certain moment of time and has definite temporal relations to all other acts experienced by the same person." These authors support the finding that behavior is not influenced only by thoughts which occur simultaneously with the decision to undertake a certain behavior. Student teacher behavior is also influenced by variables not recalled as a conscious part of the decision during the interactive phase of teaching.

"Teacher's ideas, beliefs and characteristics" is a major variable influencing student teacher behavior in all phases of the teaching process.

Wahlstrom, Jones and Regan (1978:8) conclude from their research that "teacher beliefs" were perhaps the most powerful determinants of teacher behavior and practice. Clark and Yinger (1977:295) agree stating that when teachers make decisions, they usually refer to a personal perspective. The results of this research support these conclusions. In the ranking of variables based on proportions and the ranking based on the student teachers' perceptions, "teacher's ideas, beliefs and characteristics" remained the second most influential variable.

The major variables which influence the interactive and non-interactive phases of the teaching process are different.

Clark and Yinger (1977:293) conclude that during the interactive phase, the instructional process has more influence than the characteristics or behavior of the students but that during the preactive phase, student characteristics comes before instructional process considerations.

Taylor (1970, cited in Clark & Yinger, 1977:281-282) found that during the preactive phase, these variables influenced decision making:

a.   the pupil's needs, abilities and interests,

b.   the aims and goals of the subject matter, and

c.   the teaching method.

Taylor also listed the top four variables based on teachers' ratings as

a.   context,

b.   pupils,

c.   aims and purposes of teaching, and

d.   evaluation.

Shavelson (1980) and Shavelson and Borko (1979) found that the variable which influenced judgement was "the children's level and experience." "Teacher's beliefs," "the instructional task" and "the environment" were also accorded importance. These four variables were also the top four ranked by the student teachers in this study.

Shavelson (1980) reports, after reviewing the research on the focus of thought during teaching, that there are contradictory findings: three studies found that pupil responses were the major focus, one study emphasized the nature of the task, and two studies concluded that instructional behavior was the primary focus of teachers' thoughts. In this study, those three variables were included in the five top ranked variables but "planning, management and organization" and "teacher's beliefs" were also included.

Tuckwell (1980;231-238) listed these three variables as the top three influences on teacher decision making:

a.   instructional techniques,

b.   management and control, and

    c.   interpretations or inferences made from teachers' perceptions as to what was happening in the classroom.

These were not the same variables as this study found to be ranked high for the interactive phase. This could be because Tuckwell did not include characteristics of the activity in his framework. The three variables he outlined were ranked third, fourth and fifth in this study after "teacher beliefs" and "content characteristics."

        Conners (1978a:302) reports these three variables as being major influences on teacher behavior:

    a.   instructional tactics,

    b.   characteristics of the pupils, and

    c.   awareness of pupil behavior.

Conners also lists these four variables as having less importance:

    a.   beliefs about students,

    b.   self-awareness,

    c.   lesson objectives and content, and

    d.   feelings.

     In this study,

1.   variables which were ranked higher for the interactive phase, lower for non-interactive phases and lowest from the teachers' perspective were

    a.   planning, management and organization, and

    b.   characteristics and goals of the lesson/activity;

2.   variables which were ranked lower for the interactive phase, higher for non-interactive phases and highest from the teachers' perspective included

    a.   teacher's experiences,

    b.   people who had a current and direct influence on student teacher behavior, and

    c.   children attitudes, characteristics and experience;

3.   variables which were ranked higher for the interactive phase but lower for the other two aspects were

    a.   pupil response/behavior, and

    b.   instructional behavior; and
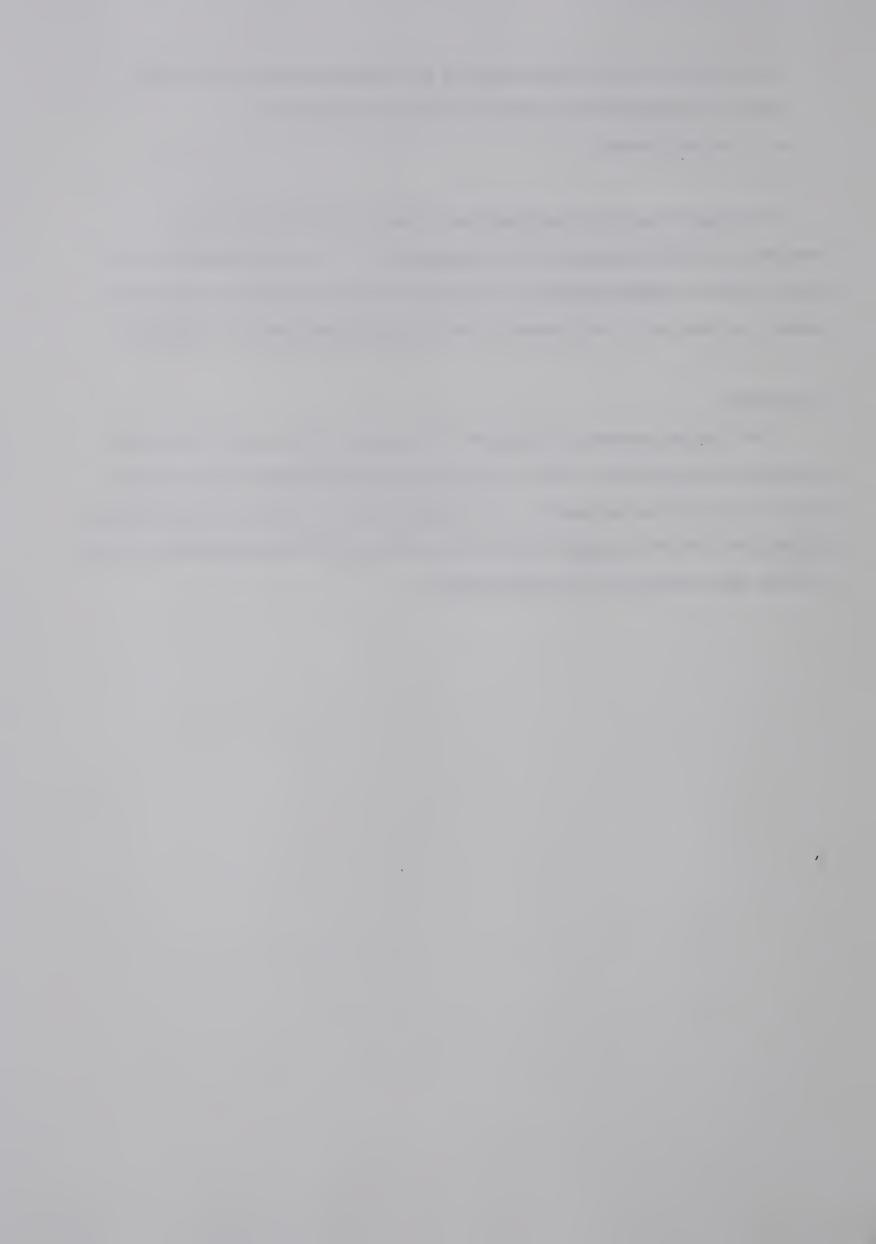
4.   the variable which was ranked lower for the interactive phase and from the

teachers' perspective than for the non-interactive phases was

a.   the environment.

The literature supports the finding that different variables have varying importance at different stages of the teaching process. The variables identified in this research and the variables identified in the literature reviewed do not coincide. Which variables are important in which phase of the teaching process remains inconclusive.

C. Summary

This chapter presented a discussion of the results. Seven major findings were reported in five general areas. These findings were then discussed in relation to the recent literature on teacher behavior. The findings seemed to be generally supported by the literature. In the next chapter, the findings will be summarized and conclusions drawn with implications made for educational research.

VI. FINDINGS, IMPLICATIONS AND SUGGESTIONS FOR FURTHER RESEARCH

This chapter will first present a short summary of this research project. A short review of the major findings follows with their implications for educational research and practice. The chapter will end with some suggestions made for further research.

A. Summary

The purpose of this study was to explore the variables which influence student teacher behavior in elementary school physical education classes. The intent of the study was to describe and interpret rather than explain or test a hypothesis and therefore no *a priori* categories, theories or models were used in the collection or analysis of data.
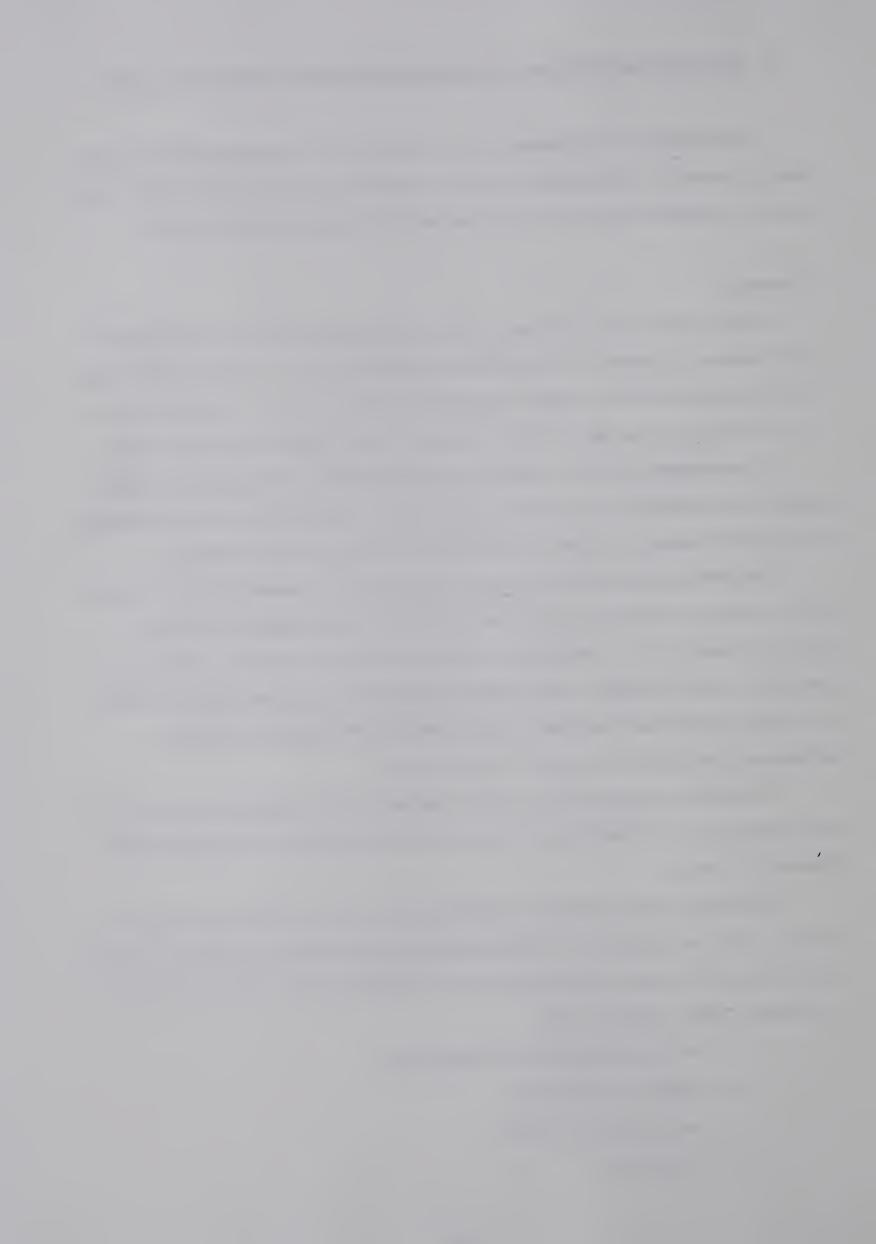
A conceptual framework, based on a general review of the research on teacher behavior, was presented to provide the reader with a perspective on how the researcher formulated the research problem and developed the methodology to examine it.

The methodology used was based on five aspects of phenomenological research: dialectic, intuitive, hermeneutic, analytic and descriptive. Every attempt was made to establish research rigor by undertaking procedures to establish credibility, applicability, auditability and confirmability. A multi-instrument approach using field notes, interviews and written surveys was employed to collect data. Content analysis and category development techniques were used to analyze the data.

The sample was comprised of eleven volunteer student teachers involved in their fourth year practicum experience working towards their Bachelor of Education at the University of Alberta.

The content analysis identified 2,559 units which were eventually reduced to 77 variables which were reported to influence student teacher behavior in elementary school physical education classes. Nine categories were developed which could account for all 77 variables. These categories were:

1) planning, management and organization,

2) teacher's experiences,

3) pupil response/behavior,

4) environment,

5) people who have a current and direct influence on student teacher behavior,

6) instructional behavior,

7) childrens' attitude, characteristics and experience,

8) teacher's ideas, beliefs and characteristics, and

9) characteristics and goals of the lesson/activity.
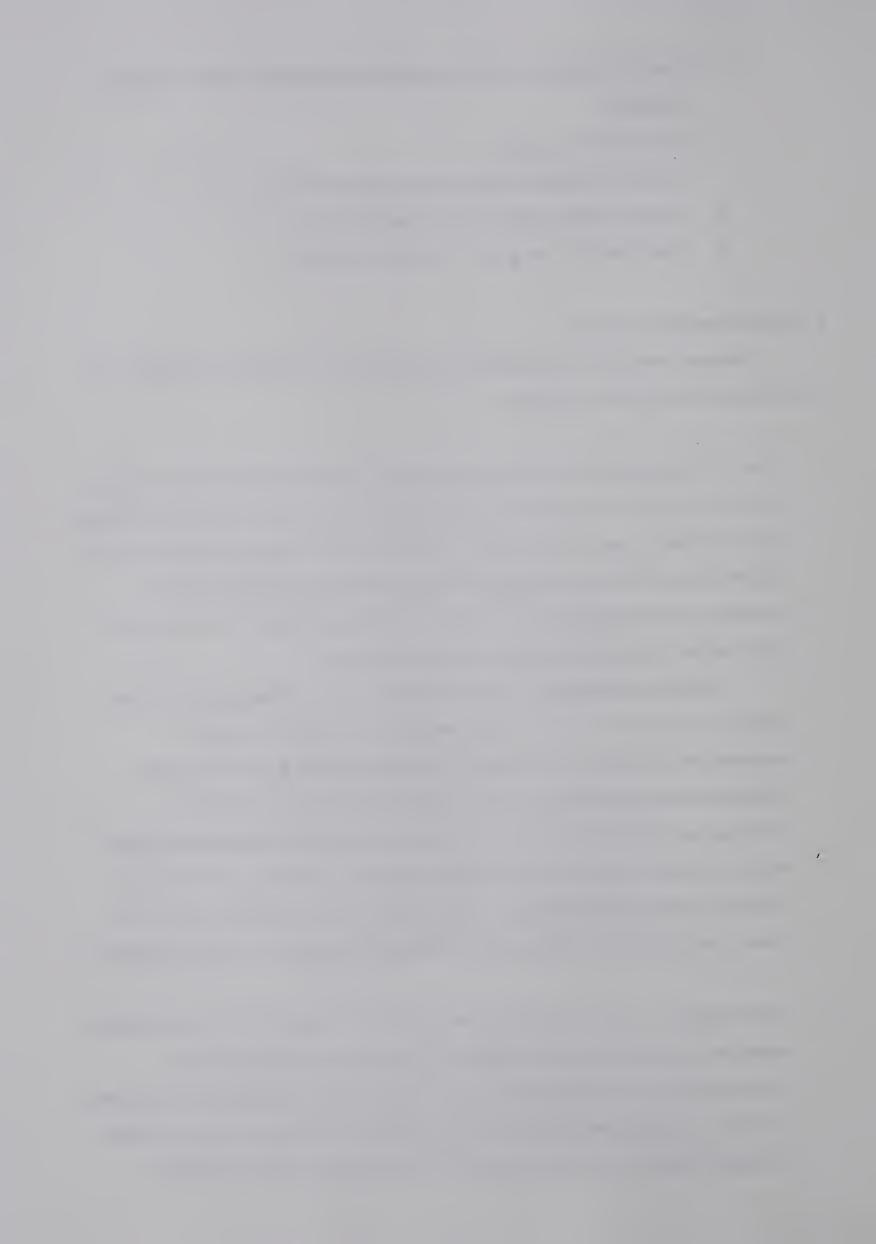
B. Findings and Implications

The major findings of the study and implications which originate from them will be presented in the following section.

1. *Student teachers make decisions regarding their behavior which they can recall, relate and justify.* This contention, that student teachers make conscious decisions regarding their behavior, has been an assumption in past research. This study adds documentation to this assumption that student teachers do in fact recall the variables which influence their behavior. This finding gives support to the use of introspective techniques in research on teacher behavior.

Explaining the meaning of teacher behavior from the perspective of the teacher may prove fruitful for teacher education programs. The use of introspective techniques may be useful in these programs to help the student teachers examine their teaching behavior and other instructional decisions. Introspective techniques could be used as an analytic tool to aid student teachers, cooperating teachers and faculty consultants better understand student teacher behavior. This understanding would probably aid in a more indepth evaluation of student teachers and more appropriate instructional decisions by student teachers.

2. *Teacher behavior is a complex phenomenon which no single variable can explain.* Researchers examining teacher behavior in the future must broaden their conceptions of the teaching process and possible research methods for exploring it. There must also be an attempt to bring together the results of previous studies on teacher behavior to provide the base for this research based on multiple
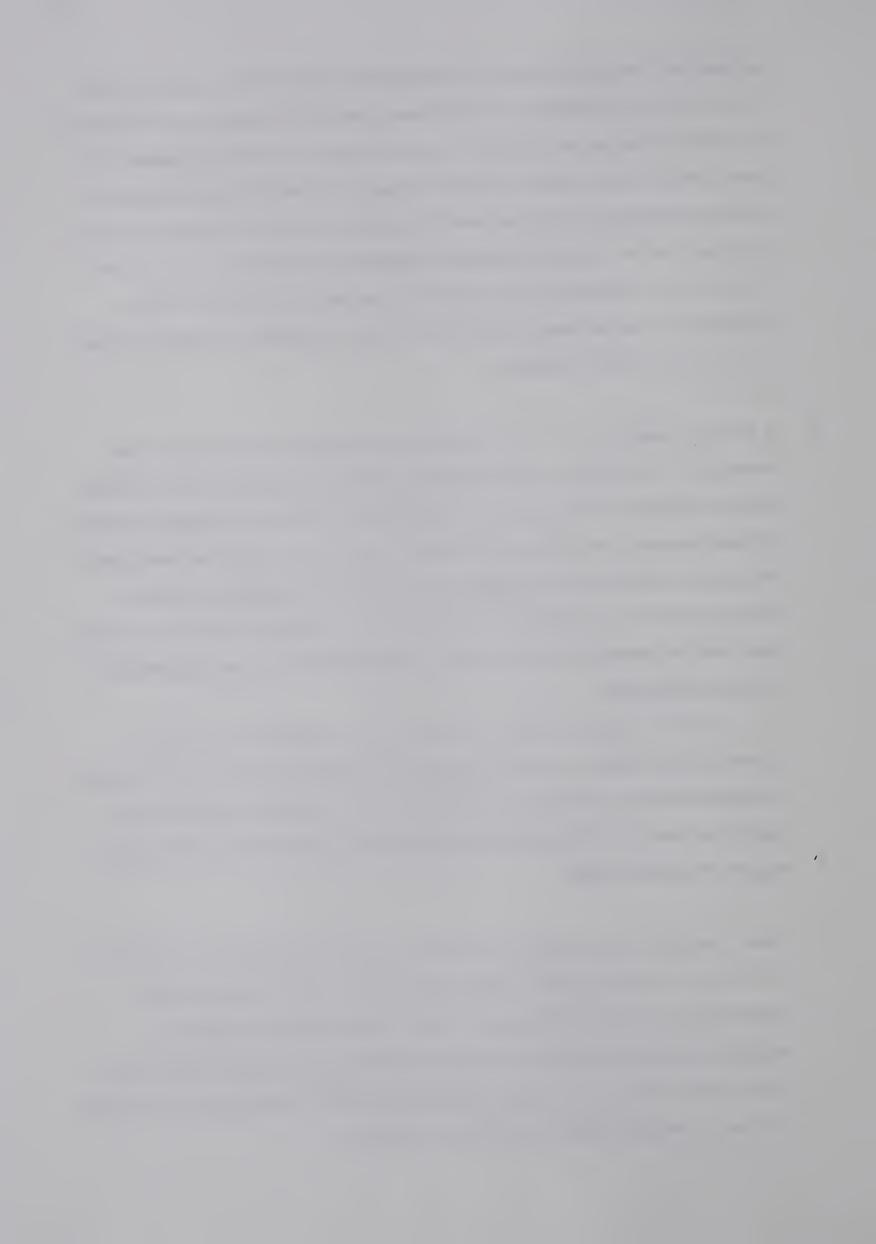
perspectives. The characteristics of the teacher, students and curriculum content, the environment, the behavior of both the teacher and the students, and the thought processes of the teacher during the interactive and non-interactive phases of the instructional process must be examined. Research on teaching must be based on multiple perspectives which can view the process as a whole. This also implies that personnel involved in teacher education programs should be more aware of the large number of variables influencing student teachers. An awareness of the complexity of teacher behavior may enable teacher educators to better understand the behavior of student teachers.

3. *A workable category system can be developed which is refined enough to be meaningful.* The category system proposed in this study could account for all the variables reported by the subjects as influencing on their teaching behavior and the variables outlined in the literature on teacher behavior. The categories developed in this research were grounded in the data and appear to be relatively inclusive. It appears that they cover the scope of the teaching process and therefore may have some utility in providing a perspective for further research on teaching based on multiple perspectives.

    Since the category "people who have a current and direct influence on student teacher behavior" was not reported in the literature as an influential variable on teacher behavior, it would be interesting to see if classroom teachers would report this category if they were being observed by one of the school or school system administrative staff.

4. *There is no basis for making generalizations regarding the use of the categories by individual student teachers.* There were no relationships identified in this research which could be generalized to other student teachers, teachers, or situations. Although there was no indication in this research that such relationships exist, further research with a larger sample might identify some common influences which exist between teachers and between situations.

5. *More than one variable influences a single observed student teacher behavior.*
    This finding, that student teachers reported multiple influences for any given
    teaching behavior, was supported in the literature. These variables were not
    consistently confined to either the interactive or non-interactive phases of the
    teaching process. This implies that when using introspective techniques to uncover
    covert mental thoughts associated with an event, probing must be used to uncover
    those other variables which may have influenced the behavior but were not directly
    associated with it. Variables which influence the interactive and non-interactive
    phases of the instructional process must be identified. The subject should also have
    time to relate all the variables which influenced that behavior – not just those which
    occured simultaneously with the event. When given the opportunity, student
    teachers can provide a rationale for their behavior.

    Faculty consultants and cooperating teachers may use interview techniques
    to help student teachers identify variables which influenced their teaching behavior.
    In this research probing appeared to help student teachers identify variables which
    were not immediately apparent. As student teachers develop an awareness of what
    influences their behavior they should be better able to choose teaching behaviors
    they may be more comfortable with and those more appropriate for the children,
    curriculum content and environment.

6. *"Teacher's ideas, beliefs and characteristics" is an influential variable in all
    phases of the teaching process.* This category was given priority in all phases of the
    teaching process by the student teachers. One implication of this finding is that
    teachers should be taught during their preservice education to use introspective
    techniques to ascertain their philosophy of teaching and the values upon which this
    philosophy is based. This may help them to understand better their decisions and
    subsequent behavior. Administrators within the school system should also be
    sensitized to the importance of "teachers' beliefs" as an influence on teacher
    behavior so that they can better plan and implement curriculum innovations.

7.	*Variables reported by student teachers as influencing their teaching behavior appear to influence differentially the interactive and non-interactive phases of the teaching process.* There was some support in the literature for this finding but contradictory findings as to which variables influenced which phase more. Which variables are important in which phase of the teaching process remains inconclusive. What may be inferred is that when undertaking research on teaching, both interactive and non-interactive thoughts and processes should be considered.

When educational personnel and teachers examine the influences on instructional behavior, all phases of the process must be reviewed. One implication for educational practice is that it may be more appropriate for teachers to focus on different aspects of the instructional process at different times. This variation in focus may improve planning, implementation and evaluation.

C. Suggestions for Further Research

The following suggestions are made for further research:

1.	Research on teacher behavior should be continued using an open perspective. A multidimensional research design may aid in putting the components of the teaching process into perspective. This kind of research, by including both interactive and non-interactive aspects of the instructional process, may result in more conclusive results because it would better be able to deal with the complex relationships involved in teaching.

2.	This kind of research should be undertaken in other settings. Research is required to explore the variables which influence the teaching behavior of full-time classroom teachers and full-time teachers in the elementay school physical education setting. This kind of research should also be extended to other educational personnel such as school administrators.

3. The use of introspective research techniques to explore teacher behavior should be continued, particulary when examining both interactive and non-interactive phases of the teaching process. Teacher behavior is purposive and one way of uncovering the reasons for and influences on that behavior is to ask the teacher. The only people aware of the meaning of teachers' actions are the teachers themselves.

4. Research should be undertaken to identify the variables which influence different phases of the teaching process and the relationships between them. The research thus far on teacher behavior has identified many variables which influence differentially the various phases of the teaching process but have not conclusively identified which variables influence which phase. Research specifically directed to identifying which variables influence which aspect of the teaching process should be undertaken.

5. Research focusing on how the nature of the curriculum content relates to teacher behavior should be undertaken. There has been research directed to teacher characteristics, pupil outcomes, environment, observable behavior and many other aspects of the instructional process but there appears to be little research directed at how the nature of the curriculum content influences teacher behavior.

6. A research project examining intra-teacher consistency of influences on teaching behavior in different settings may prove fruitful. Many variables which influence teacher behavior have been identified but whether these variables remain constant for individual teachers from setting to setting or over a period of time has yet to be established.

7. Research using a phenomenological methodology should be continued. In this study, this kind of research seemed to enhance the breadth of the research, the kind of data collected and the possible interpretation of the results.
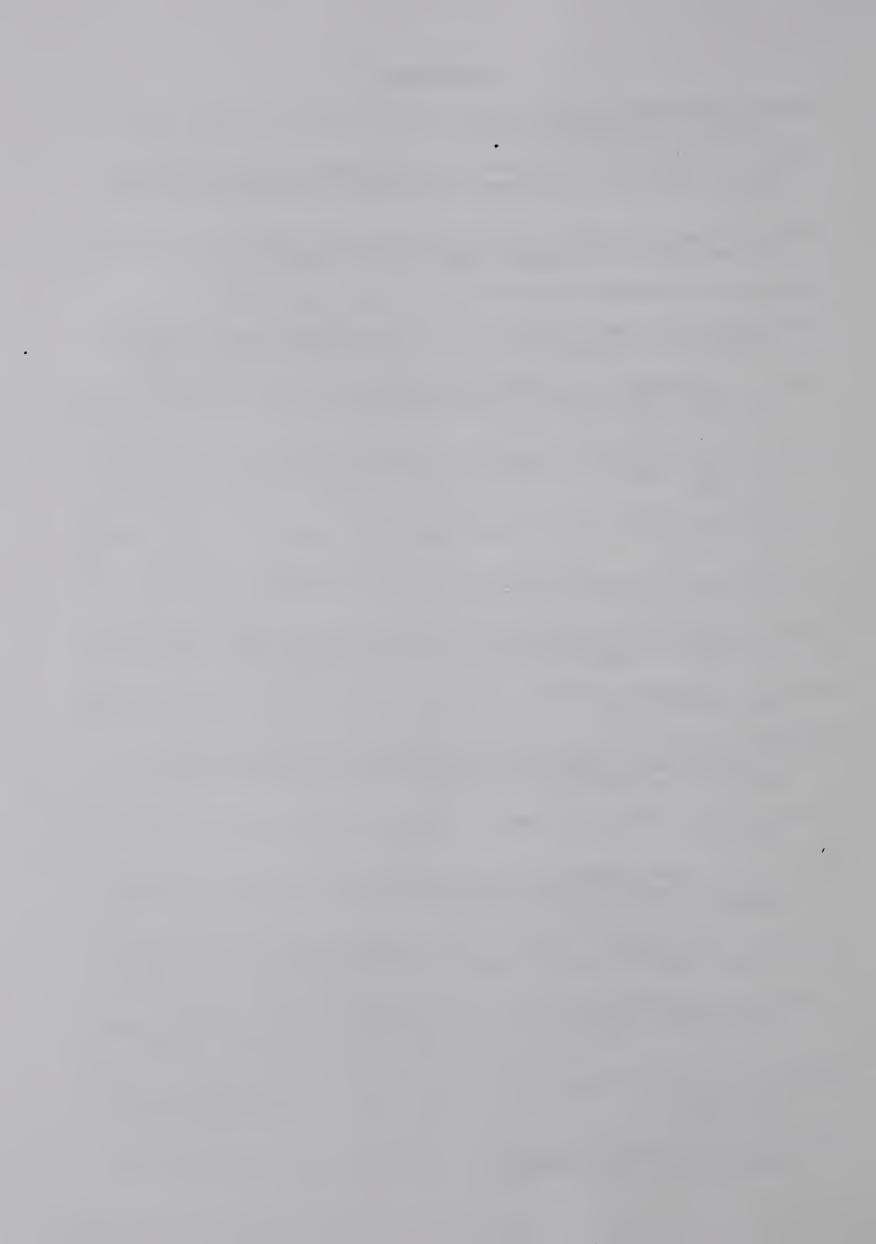
In conclusion, the findings of this study have confirmed a number of beliefs held by many educators. What may be more important is the research methodology utilized which provides a viable alternative for research on teacher behavior viewed from a multiple perspective.
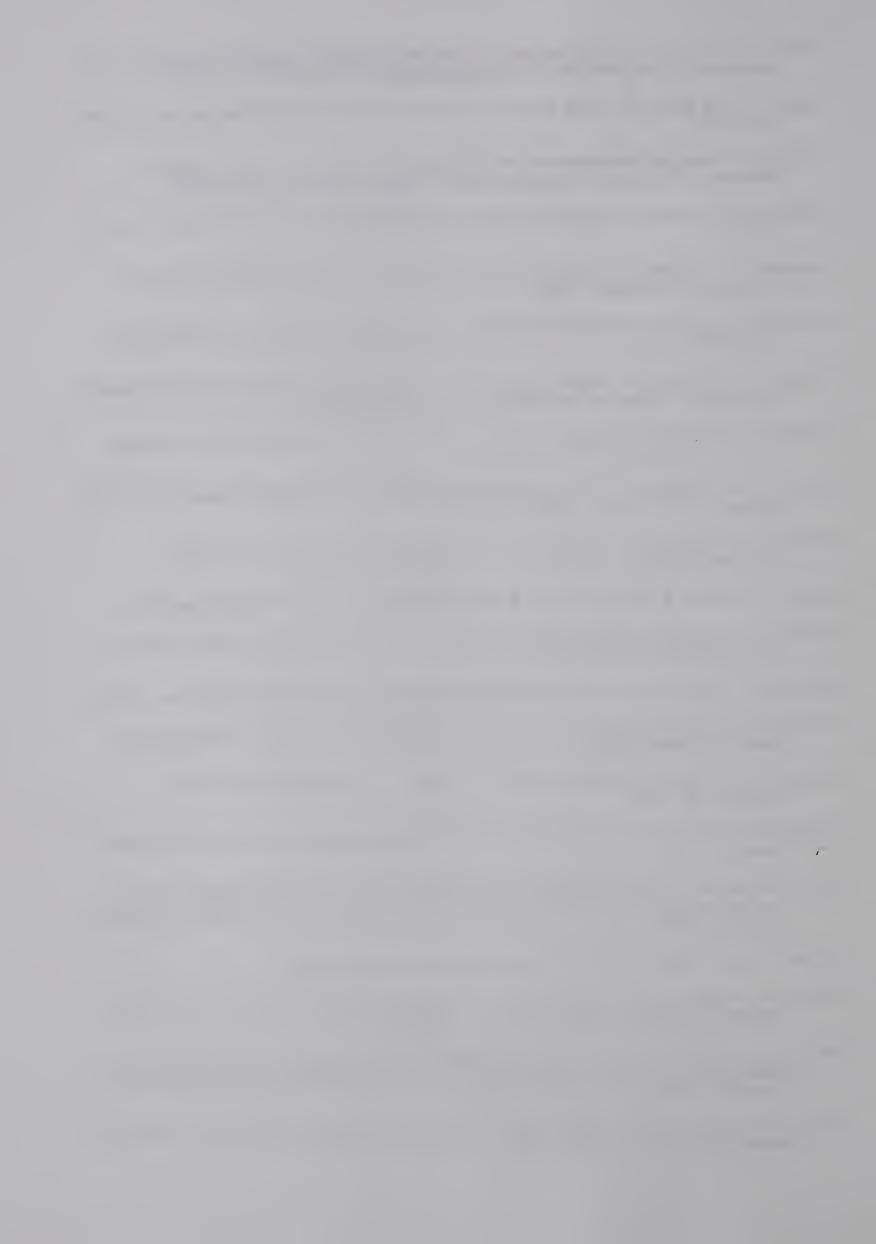
REFERENCES

Barker, R. G. and Associates. *Habitats, Environments, and Human Behavior.* San Francisco: Jossey-Bass Pub., 1978.

Barker, R. G. Streams of Individual Behavior. In R. G. Barker & Associates. *Habitats, Environments, and Human Behavior.* San Francisco: Jossey-Bass Pub., 1978a, 3-16.

Barker, R. G. Return Trip, 1977. In R. G. Barker & Associates. *Habitats, Environments, and Human Behavior.* San Francisco: Jossey-Bass Pub., 1978b, 285-296.

Barrett, W. *Irrational Man.* New York: Doubleday Anchor Books, 1958.

Barrington, G. V. The Impact of Environmental Forces on Alberta Community Colleges 1980-1990. Unpublished doctoral dissertation, University of Alberta, 1981.

Biddle, B. J. The Integration of Teacher Effectiveness Research. In B. J. Biddle & W. J. Ellena (eds). *Contemporary Research on Teacher Effectiveness.* New York: Holt, Rinehart & Winston, 1964, 1-40.

Borko, H., Cone, R., Russo, N. & Shavelson, R. Teacher's Decision Making. In P. Peterson & H. Walberg, *Research on Teaching.* Berkeley: McCutchan Pub. Corp., 1979, 136-160.

Bronfenbrenner, U. *The Ecology of Human Development.* Cambridge: Harvard University Press, 1979.

Bronfenbrenner, U. Toward an Experimental Ecology of Human Development. *American Psychologist. 32*(7), 513-531, July 1977.

Brophy, J. Teacher Behavior and its Effects. Occasional Paper #25. East Lansing: Institute for Research on Teaching, Michigan State University, Sept. 1979.

Campbell, W. J. Studies of Teaching. *New Zealand Journal of Educational Studies. 3*(2), Nov. 1968, 97-124.

Chamberlin, J. G. Phenomenological Methodology and Understanding Education. In D. E. Denton (ed). *Existentialism and Phenomenology in Education.* New York: Teachers College Press, 1974, 119-138.

Clark, C. & Yinger, R. Research on Teacher Thinking. *Curriculum Inquiry, 7*(4) 1977, 279-304.

Collins, C. The Pragmatic Rationale for Educational Research in Its Phenomenological Horizons. A unpublished paper presented at the American Educational Research Association Annual Meeting, April 1979.

Conners, R. D. An Analysis of Teacher Thought Processes, Beliefs and Principles During Instruction. Unpublished doctoral dissertation, University of Alberta, 1978a.

Conners, R. D. Using Stimulated Recall in Naturalistic Settings - Some Technical Procedures. Occasional Paper Series Technical Paper 78-2-1. Edmonton: Centre for Research in Teaching, Faculty of Education, University of Alberta, 1978b.

Dallmayr, F. R. Phenomenology and Social Sciences: An Overview and Appraisal. In D. Carr & E. S. Casey (eds). *Explorations in Phenomenology.* The Hague: Martinus Nijhoff, 1973, 133-166.

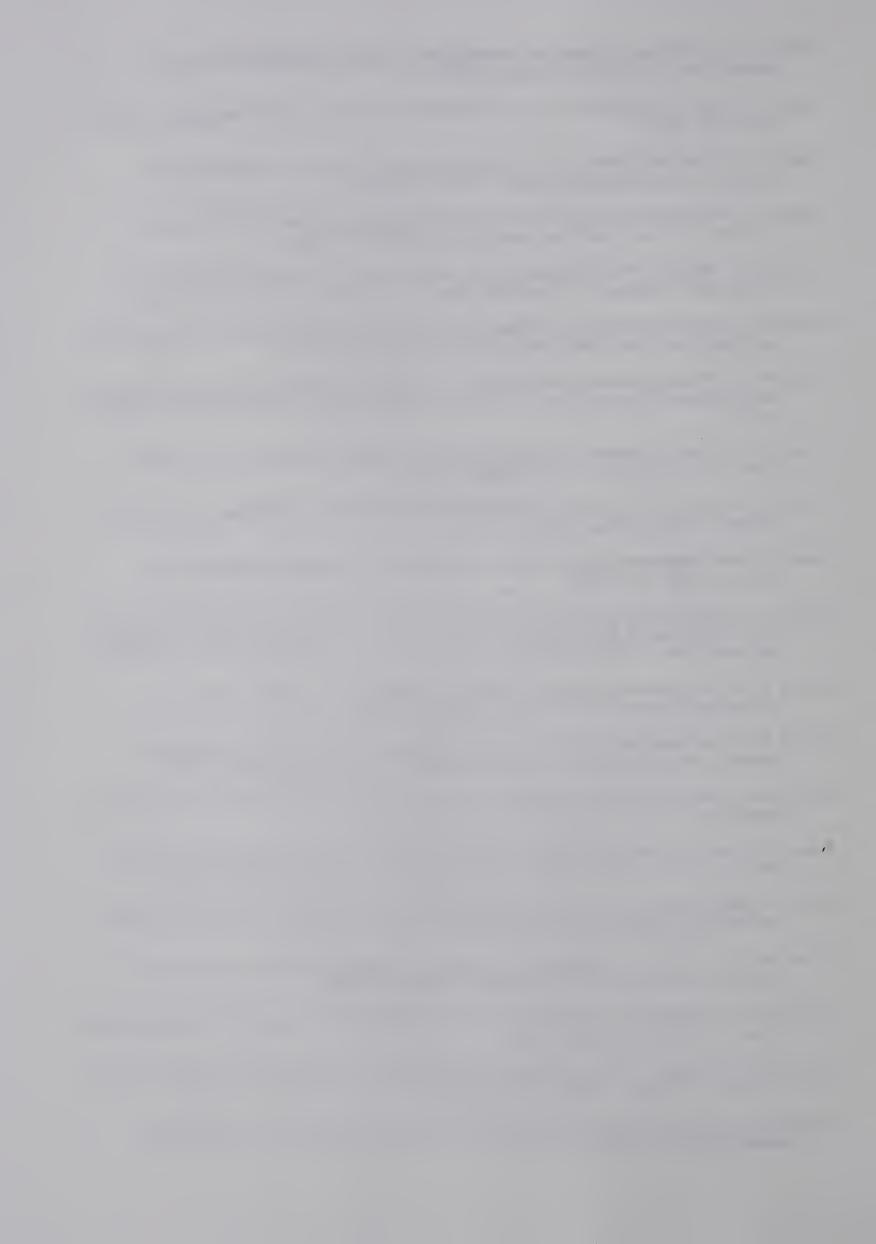Denton, D. E. Understanding the Life World of the Counselor. *Personnel and Guidance Journal: 59*, May 1981, 196-599.

Denton, D. E. Concepts and Strategies of Phenomenological Research. Unpublished paper presented to the American Educational Research Association, April 1979.

Dunkin, M. J. & Biddle, B. J. *The Study of Teaching*. New York: Holt, Rinehart and Winston, Inc., 1974.

Fedigan, L. Classroom Management and Achievement: A Review of the Literature. Edmonton: Planning and Research Branch, Alberta Education, May 1980.

Flanders, N. A. *Analyzing Teaching Behavior*. Massachusetts: Addison—Wesley Pub. Co., 1970.

Flanders, N. A. *Interaction Analysis in the Classroom*. Michigan: School of Education, University of Michigan, 1966.

Fourcher, L. A. A Developmental Scheme is a 'Bad Dialectic'. *Human Development: 24*, 172—194, 1981.

Gage, N. L. Paradigms for Research on Teaching. In N. L. Gage (ed). *Handbook of Research on Teaching* . Chicago: Rand McNally & Co., 1963, 94—141.

Gayle, G. M. A Model of Second—Language Teaching. *The Canadian Modern Language Review. 35*(3), March 1979, 348—365.

Glaser, B. G. & Strauss, A. L. The Purpose and Credibility of Qualitative Research. *Nursing Research: 15*(1), Winter 1966, 56—61.

Glaser, B. G. & Strauss, A. L. *The Discovery of Grounded Theory: Strategies for Qualitative Research*. Chicago: Aldine Publishing Co., 1967.

Guba, E. & Lincoln, Y. *Effective Evaluation*. San Francisco: Jossey—Bass Pubs., 1981.

Guetzkow, H. Unitizing and Categorizing Problems in Coding Qualitative Data. *Journal of Clinical Psychology: 6*, 47—57, 1950.

Gurwitsch, A. *The Field of Consciousness*. Pittsburgh: Duquesne University Press, 1964.

Holsti, O. R. *Content Analysis for the Social Sciences and Humanities*. Reading, Mass: Addison—Wesley, 1969.

Kelly, W. L. & Tallon, A. *Readings in the Philosophy of Man* (2nd ed). New York: McGraw—Hill, 1972.

Kerlinger, F. *Foundations of Behavioral Research* (2nd ed). New York: Holt, Rinehart and Winston, 1973.

King, L. & Smyth, J. Some Promising Variables in the Study of Teacher Effectiveness. Unpublished monograph prepared for the Alberta Teachers' Association. Edmonton: June 30, 1978.

Lewin, K. *Field Theory in Social Science*. New York: Harper, 1951.

Lutz, F. W. & Iannaconne, L. *Understanding Educational Organizations: A Field Study Approach*. Columbus: Charles E. Merrill, 1969.

MacKay, D. A. & Marland P. Thought Processes of Teachers. Occasional Paper Series, Research Report #80—1—10. Edmonton: Centre for Research in Teaching, Faculty of Education, University of Alberta, 1980.

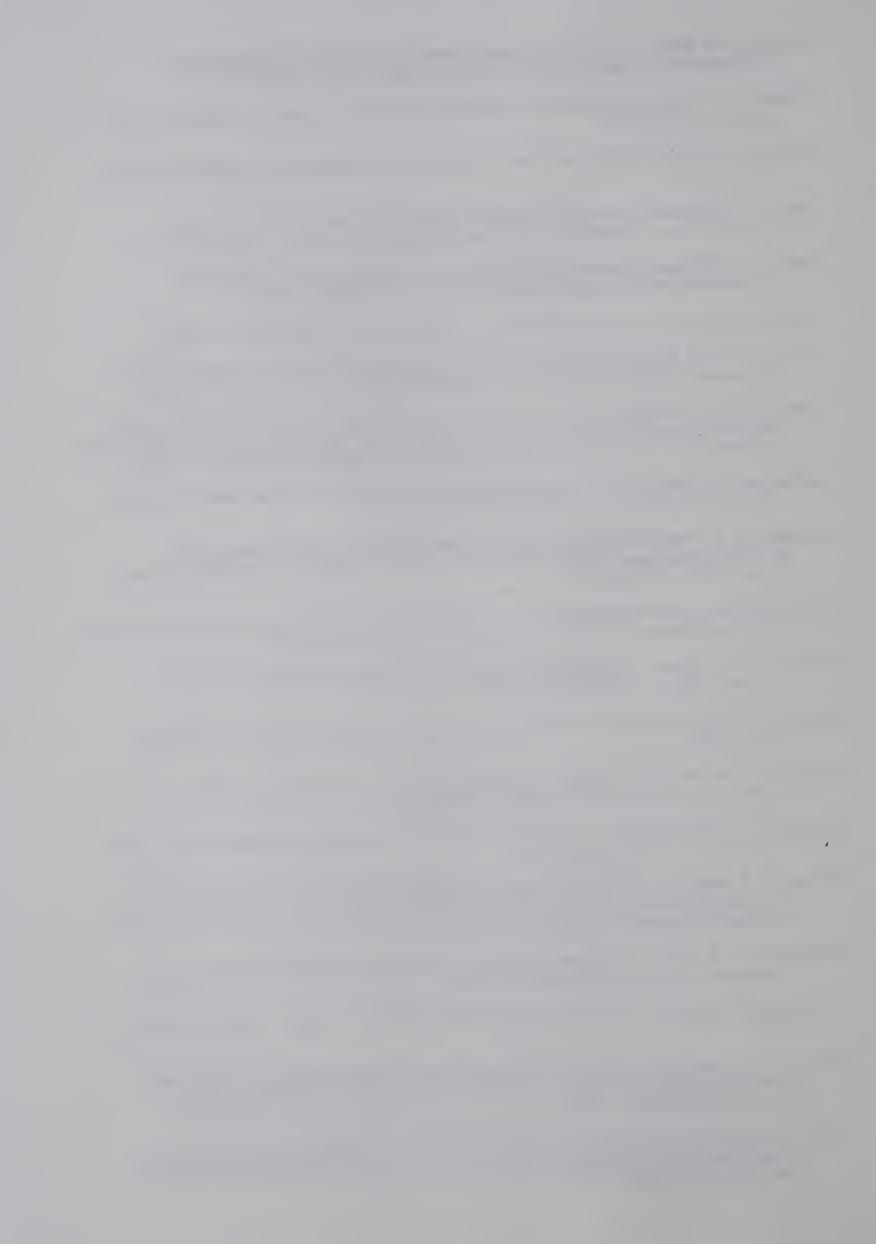Magoon, A. J. Constructivist Approaches in Educational Research. *Review of Educational Research: 47*(4), 1977, 651—693.

Marland, P. W. A Study of Teachers' Interactive Thoughts. Unpublished doctoral dissertation, University of Alberta, 1977.

Marleau-Ponty, M. *Phenomenology of Perception* (2nd ed). London: Routledge & Kegan Paul, Ltd., 1965.

Martin, W. R. Teacher Behaviors – Do They Make A Difference? A Review of the Research. *Kappa Delta Pi Record: 16*(2), 1979, 48.

Medley, D. M. & Mitzel, H. E. Some Behavioral Correlates of Teacher Effectiveness. *Journal of Educational Psychology: 50*, 239–246, 1959.

Mitzel, H. E. Teacher Effectiveness. In C. W. Harris & M. R. Liba (eds). *Encyclopedia of Educational Research, 3ed edition.* New York: MacMillan, 1960, 1481–1485.

Natanson, M. Phenonemology as a Rigorous Science. In T. Luckman (ed). *Phenomenology and Sociology.* New York: Penguin Books, 1978, 181–199.

Natanson, M. Phenomenology and the Social Sciences. In M. Natanson (ed). *Penomenology and the Social Sciences* (Vol 1). Evanston: Northwestern University Press, 1973, 3–44.

Oliver, B. & Taylor, J. Teacher Characteristics and Classroom Behavior. *Journal of Classroom Interaction, 16*(1), 1980, 11–18.

Peterson, K. Teacher Performance and Development: A Structural Model. *The Teacher Educator: 15*(3), Winter 1979, 22–30.

Poole, R. From Phenomenology to Subjective Method. *Universities Quarterly: 29,* Autumn 1975, 412–440.

Ricoeur, P. Human Sciences and Hermeneutical Method: Meaningful Action Considered as a Text. In D. Carr & E. S. Casey (eds). *Explorations in Phenomenology.* The Hague: Martinus Nijhoff, 1973, 13–46.

Rist, R. C. On the Means of Knowing: Qualitative Research in Education. *New York University Quarterly: 10,* 17–21, Summer 1979.

Rist, R. C. On the Relations Among Educational Research Paradigms: From Disdain to Detente. *Anthropology and Education Quarterly: 7*(2), 42–29, May 1977.

Ryans, D. G. *Characteristics of Teachers: Their Description, Comparison and Appraisal.* Washington: American Council on Education, 1960.

Ryans, D. G. *An Information-System Approach to Theory of Instruction With Special Reference to the Teacher.* Santa Monica: System Development Corp., 1963.

Schutz, A. Phenomenology and the Social Sciences. In T. Luckman (ed). *Phenomenology and Sociology.* New York: Penguin Books, 1978, 119–141.

Shavelson, R. J. & Borko, H. Research on Teachers' Decisions in Planning Instruction. *Educational Horizons: 57*(4), Summer 1979, 183–189.

Shavelson, R. J. Research on Teachers' Pedagogical Thoughts, Judgements, Decisions and Behavior. Unpublished paper, 1980.

Shulman, L. S. & Lanier, J. E. The Institute for Research on Teaching: An Overview. *Journal of Teacher Education. 58*(4), 44–49, 1977.

Spiegelberg, H. *The Phenomenological Method* (2nd ed, Vol 1 & Vol 2). The Hague: Martinus Nijhoff, 1965.

Stanage, S. M. Meaning and Value: Human Action and Matrices of Relevance in Philosophies of Education. *Educational Theory: 26*(1), 1976, 53–71.

Strasser, B. A Conceptual Model of Instruction. *Journal of Teacher Education: 18*(1), Spring 1967, 63–74.

Strasser, S. *Phenomenology and the Human Sciences*. Pittsburgh: Duquesne University Press, 1963.

Taylor, C. Interpretation and the Sciences of Man. In D. Carr & E. S. Casey (eds). *Exploration in Phenomenology*. The Hague: Marinus Nijhoff, 1973, 47–101.

Tenove, S. Community Health Nurse Evaluation: The Stakeholders' Perspective. Unpublished doctoral dissertation, University of Alberta, 1982.

Tillich, P. *The Courage To Be*. New Haven & London: Yale University Press, 1952.

Tuckwell, N. B. A Study of the Impact of an Intervention Program on Teacher Thought Processes. Unpublished doctoral dissertation, University of Alberta, 1980a.

Tuckwell, N. B. Stimulated Recall: Theoretical Perspectives and Practical and Technical Considerations. Occasional Paper Series Technical Report 8–2–3. Edmonton: Centre for Research in Teaching, Faculty of Education, University of Alberta, 1980b.

Vandenburg, D. Existential and Phenomenological Influences in Educational Philosophy. *Teachers College Record: 81*(2), 1979, 166–191.

Vandenburg, D. Phenomenology and Educational Research. In D. E. Denton (ed). *Existentialism and Phenomenology in Education*. New York: Teachers College Press, 1974, 183–220.

Van Manen, M. J. An Exploration of Alternative Research Orientations in Social Education. *Theory and Research in Social Education: 3*(1), 1975, 1–28.

Wahlstrom, M., Jones, R. & Regan, E. Teachers Beliefs Make a Difference. *School Guidance Worker, 33*(4) 1978, 4–8.

Wax, R. H. *Doing Fieldwork: Warnings and Advice*. Chicago: University of Chicago Press, 1971.

Wilson, S. The Use of Ethnographic Techniques in Educational Research. *Review of Educational Research: 47*(1), 1977, 245–265.

Witherell, C. S. & Erickson, V. L. Teacher Education as Adult Development. *Theory into Practice. 17*(3), 229–238, 1978.

Withey, S. & Jaeger, R. M. Survey Research Methods in Education. Audio tape series: R. M. Jaeger (ed). *Alternative Methodologies in Educational Research*. American Educational Research Association, 1980.

Wodlinger, M. A Study of Teacher Interactive Decision Making. Unpublished doctoral dissertation, University of Alberta, 1980.

Wolcott, H. F. *The Man in the Principal's Office*. New York: Holt, Rinehart & Winston, 1973.

Wolcott, H. Ethnographic Methods in Education. Audio tape series: J. M. Jaeger (ed). *Alternative Methodologies in Educational Research*. American Educational Research Association, 1980.

Yinger, R. J. Fieldwork as a Basis for Theory Building in Research on Teaching. An unpublished paper presented at the American Educational Research Association Annual Meeting, March 1978.

APPENDIX A

69

REVIEW OF MODELS OF TEACHER BEHAVIOR

REVIEW OF MODELS OF TEACHER BEHAVIOR

The purpose of this review was to identify models of teacher behavior: its development and variables which influence it. This review is not exhaustive. There has been a great deal of research in this area but most studies focus on one teacher behavior variable. The models to be reviewed have been selected because they present a more inclusive perspective of the teaching—learning process. The models and paradigms are presented in chronological order.,

Mitzel's Schema for Teacher Effectiveness Research

Mitzel (1957;cited in Gage,1963) attempted to develop a research paradigm utilizing the results of fifty years of research on teacher effectiveness. The model includes five categories: teacher variables, pupil variables, environmental variables, teacher/student classroom behaviors and pupil growth. Teacher or type I variables were those human characteristics which accounted for individual differences – attitude, achievement,knowledge, etc. Environmental or type II variables modify or influence the teaching—learning process – school size, community, equipment, etc. Pupil variables include student interests, attitudes, abilities, etc. Teacher/student classroom behaviors or type III variables are behaviors exhibited in the classroom extracted from the larger pool of teacher/student out-of-class behaviors. Pupil growth or type IV variables include measurable outcomes – knowledge, attitude, skills, etc.

Mitzel (1960:1482–1485) proposed three criteria of teacher effectiveness: presage, process and product criteria. Presage criteria are not directly associated with the goals of education, their relevance depends on an assumed relationship to either the process or product of teaching – personality, teacher education, teacher status, knowledge and achievement. Process criteria are not directly related to the goals of education but mediate achievement – teacher behavior and student behavior. Product criteria depend on a change of behavior in the direction of the goals of education – growth, achievement, attitudes, etc.

Runkel's Paradigm

Runkel's (1958,cited in Gage, 1963) model of pupil-teacher interaction is described in Gage. Runkel formulated his model utilizing communication concepts. Both the teacher and pupil enter the interaction with their personal histories - needs, goals, etc. The teacher has goals for what she wants the pupil to learn while the student has goals for what he wants to learn. Both the teacher and student have a frame of reference which filters information input. The acts of the two participants are molded by the environment in which the act takes place.

Ryans' Teacher Information Processing System

Ryans (1960) completed an indepth study of teacher characteristics. He went on from that study to develop a model of a teaching information processing system culminating in teacher behavior (1963:43). The conceptual framework for the model was derived from three sources: von Bertalanffy's (1950;1956, cited in Ryans, 1963) general systems theory where elements of a system are seen as interdependent and function as a whole; Sears' (1951, cited in Ryans, 1963) dyadic sequence which described teaching as the interaction of two or more individuals; and the mechanistic information theory defined in terms of source, transmitter, channel, receiver and destination proposed by Hartley (1928, cited in Ryans, 1963) and expanded by Shannon (1948, cited in Ryans, 1963). The model includes three categories: external information inputs, internal information inputs and information processing capabilities, and teacher information processing. External information inputs include conditions and characteristics external to the teacher - objectives, content, aids, pupil behavior, administrative policies, culture, and counseling-guidance. Teacher internal inputs and information processing capabilities include physical-physiological characteristics, general capabilities, abilities and capacities, behaving styles, affective set, and retrievable information. These characteristics are influenced by genetic and experiential conditions - heredity, teacher education, acquired incentives, home background, and the cultural/community context brought up in. Teacher information processing includes input processing, information channeling for decision-making, decision-making, processing of output, preparing for transfer, and output.

Biddle's Model

Biddle (1964:5) suggests a seven variable model for teacher effectiveness. School and community contexts include physical environment, culture, needs of community, laws and customs, etc. The classroom situation contains all the physical and social elements which occur. The other five variables are postulated as forming a cause-effect sequence: formative experiences include training, socialization, or any other experience encountered prior to the classroom situation; teacher properties are those unobservable psychological traits - motives, abilities, knowledge, etc.; teacher behaviors can be observed and studied objectively - traits, directives, responses, etc.; immediate effects include the immediate response students have to the teacher; and long-term consequences are the consequences the teacher-pupil interaction has had on the pupil, school and community.

Strasser's Model of Instruction

Strasser (1967:69-70) examined extra-situational factors which affect the teaching-learning process to an unknown degree. Teacher behavior is mediated by the teacher's personality, the situation and the affects of past behaviors. The teacher's strategy and tactics repertoire, plus goals that motivate behavior, also impinge on the process.

Campbell's Paradigm for Research

Campbell (1968) proposes a model for research into classroom practices developed from an indepth review of the literature. His model includes six types of variables: trainee variables - needs , values, objectives, etc.; training experiences - college, number of years, practicum, and educational experiences; teacher personality - needs, values, abilities, etc.; classroom practice - management, affective, and cognitive; and pupil outcomes - cognitive, affective and psychomotor.

Dunkin and Biddle's Model

Dunkin and Biddle's (1973:36) model for the study of classroom teaching utilizes four classes of variables: presage, context, process, and product. Presage variables

include teacher formative experiences, teacher training experiences and teacher properties. Context variables are the characteristics of the environment to which the teacher must adjust. Process variables include all the observable activities occurring in the classroom and product variables concern the outcomes of teaching.

Bronfenbrenner's Systems Approach

Bronfenbrenner (1977) proposes an experimental ecology of human development. The system is seen as an arrangement of structures each contained within the next. The system is made up of a microsystem which includes the person and his immediate environment; a mesosystem is the relationship between the various microsystems containing a person at a particular point in time; an exosystem extends the mesosystem to include social structures impinging on the settings in which the person is found; and a macrosystem which refers to the culture which impinges on all systems.

King and Smyth's Review

King and Smyth (1978) prepared a review of promising variables in the study of teacher effectiveness. The review included variables from research on quantity of instruction, academic orientation, classroom interaction, non-observable variables, grouping modes and seatwork which appear to be significant. They concluded that although allocated time appears to be insignificant, engaged time does. Classroom management also appears to be important. Goal-directed behavior and a variety of instructional techniques appear to be associated with student learning. Teacher monitoring, teacher involvement and grouping are considerations when planning the learning environment. Appropriate teacher interaction including climate, student-initiated interaction and feedback are related to student performance and achievement. While research on teachers' covert behavior is still in the exploratory stages, findings from studies focusing on decision-making are tentatively associated with more effective teaching.

Gayle's Model of Second-Language Teaching

Gayle (1979) described the sociological, educational and personal factors which

determine a teacher's style of teaching. The teacher variables identified are knowledge of the subject, general knowledge, language skills, training, personality, attitudes, cognitive skills, and strategies. Socio-economic conditions, official goals, pupil characteristics and parental attitudes are also seen as relevant to teaching style. Further elements were discipline, time allocation to subject matter and adaptation to the physical environment.

Peterson's Structural Model

A four level model of teacher functioning is proposed by Peterson (1979). The first level is competencies derived from the subject matter, characteristics of the learner, and instructional methods. Concepts about the subject matter, the learner, instructional methods and learning strategies represent the second level in the hierarchy which leads to specific behaviors and goals for instruction. The third level entails perceptions – the awareness sensitivity of the teacher to receive, process and interpret stimuli. The final stage is self-certainty defined as what a person knows about himself and his experiences. Certainty leads to individual beliefs, values and goals.

Shavelson's Overview

Shavelson (1980:5) assumes that teacher behavior is guided by thought, judgements and decisions. In an earlier model developed with Borko (1979) teacher characteristics are seen as influencing the information teachers seek. Other variables such as information about students, nature of the task, alternative instructional techniques, institutional constraints and external pressures influence instructional decisions. Shavelson (1980) refines this model to present an overview of research on teachers' judgements, decisions and behavior. This model includes antecedent conditions: information about students, nature of the task and the classroom/school environment; teacher characteristics: beliefs, conceptions of the subject matter and cognitive complexity; teacher's cognitive processes which include information selection and integration and inferences made about the information; consequences for teachers: instructional planning and teacher behavior, which leads to consequences for students and teacher evaluation. The variables are seen as acting in a cyclical manner leading back to the antecedent conditions.

Fedigan's Review

Fedigan (1980) reviewed the literature on classroom management and achievement. He suggested a model for teaching which accounts for the results of three research traditions: process-product studies focusing on generic variables; environmental studies looking at the behavior of and interaction between the teacher and students; and contextual research focusing on time in relation to learning. Fedigan (1980:3) postulates that a model based on these three paradigms would include teacher characteristics, teacher behavior, student characteristics, student behavior, and learning.

APPENDIX B

RESPONDENT QUESTIONNAIRE

RESPONDENT QUESTIONNAIRE

Circle the number which best represents your reaction to the following statements.

1 – strongly agree

2 – agree

3 – disagree

4 – strongly disagree

5 – do not know or no opinion

1.   I understood all the interview questions.

    1   2   3   4   5

2.   My answers were frank.

    1   2   3   4   5

3.   The questions were biased.

    1   2   3   4   5

4.   The interviewer appeared to be neutral.

    1   2   3   4   5

5.   The interview was adequate to cover the variables I thought were important in determining my behavior.

    1   2   3   4   5

6.   I answered each question as honestly as possible.

    1   2   3   4   5

7.   The interviewer suggested a particular point of view.

    1   2   3   4   5

8.   Other respondents will interpret the interview questions the same way I did.

    1   2   3   4   5

9.   The interviewer gave me ample opportunity to express my reasons for my behavior.

    1   2   3   4   5

10. The interview was fair and free from prejudice.

    1   2   3   4   5

APPENDIX C

78

STUDENT TEACHER INFORMATION SHEET

STUDENT TEACHER INFORMATION SHEET

Name:

Address:

Phone Number:

University I.D. Number

I will be practice teaching in: (a)January   (b)March.

I would be willing to have Cathy Campbell observe me teach a physical education class
and have her interview me in regards to the reasons for my choice of teaching methods?
Yes   No

I understand that the purpose of the research is non-evaluative and that any information I
disclose is confidential and that my name will not be released? Yes   No

The participant retains the right to withdraw from the study at any time and that
information gained from him/her would then be eliminated from the study.

The following are Movement Education or activity courses which I have taken or am
presently taking:

	Course Number	Topic of Course
eg.	Mov 321	introduction to games
1.		
2.		
3.		
4.		
5.		

Continue on the back of the page if necessary.

Should you have any questions regarding my research please do not hestiate to call me at 432-3094, or at home at 487-4041.

Thank you for your cooperation. I will be getting in contact with you early in your practice teaching about a convenient time to observe a physical education class and to conduct an interview.
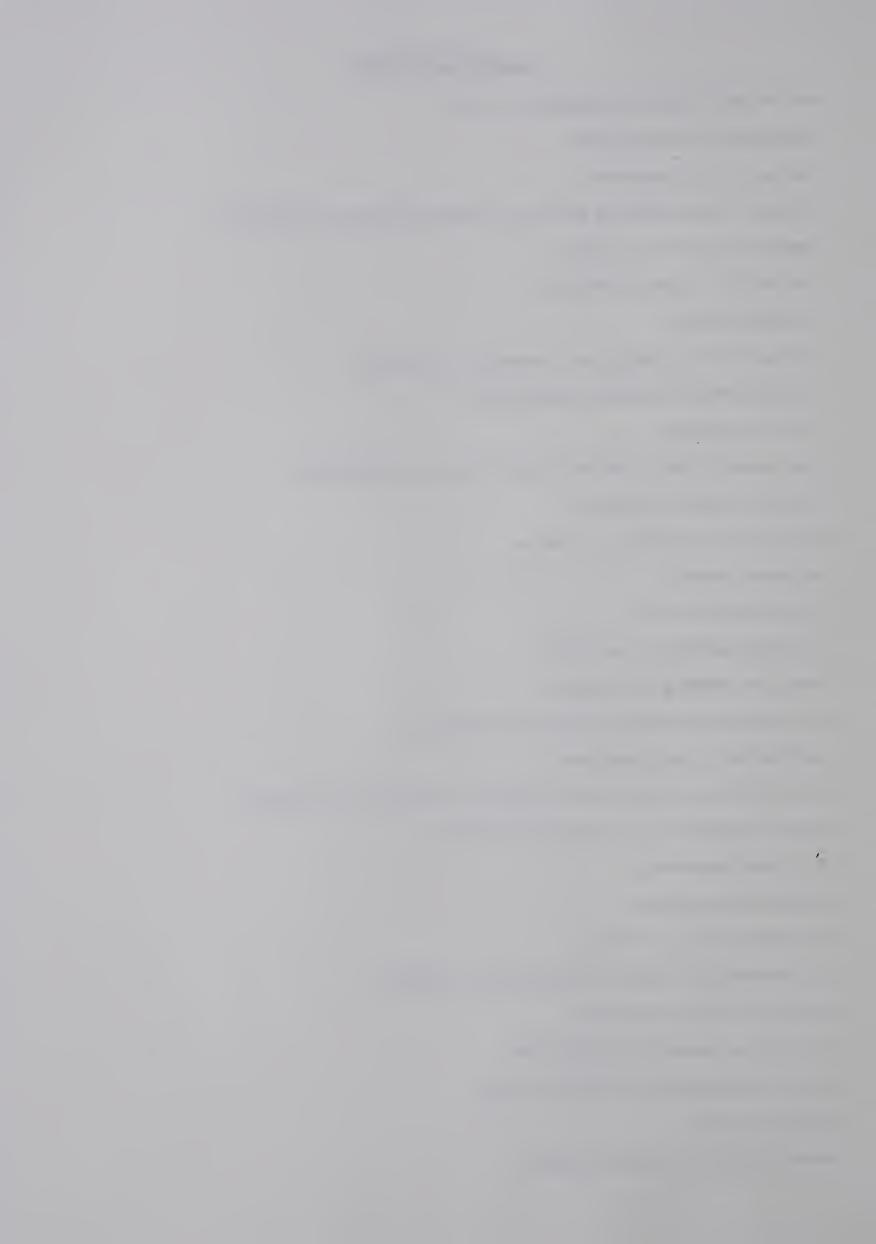
Yours truly

Cathy Campbell

APPENDIX D

81

SAMPLE FIELD NOTES

APPENDIX D

SAMPLE FIELD NOTES

-the children lined up in a girls and boys line

-the small play area was used

-theme was body awareness

-you asked them what they were to do when they got to the play room

-they came in and sat in a circle

-you sat in the middle of the circle

-you used a balloon

-you had the circle get bigger or smaller like the balloon

-you asked them what shape a balloon was

-you introduced me

-you frequently sent a child to sit out for a short period of time

-you used a clap for attention

-you carried your lesson plan with you

-you wore sneakers

-one child had bare feet

-you cautioned them to be careful

-they were skipping and hopping

-one child demonstrated skipping and one hopping

-you had them change directions

-you pointed out the differences between one and two foot hopping

-had all the children try it on one foot then two

-you added backwards

-combined skip and hop

-focused on arms up in the air

-you demonstrated really small and rising to a big hop

-had them all sit for instructions

-why did you demonstrate at that time

-why four children demonstrating at a time

-pop and explode

-slowly expand (you did it with them)

-interjecting with what children were doing

-you used Jeff frequently for demonstrations

APPENDIX E
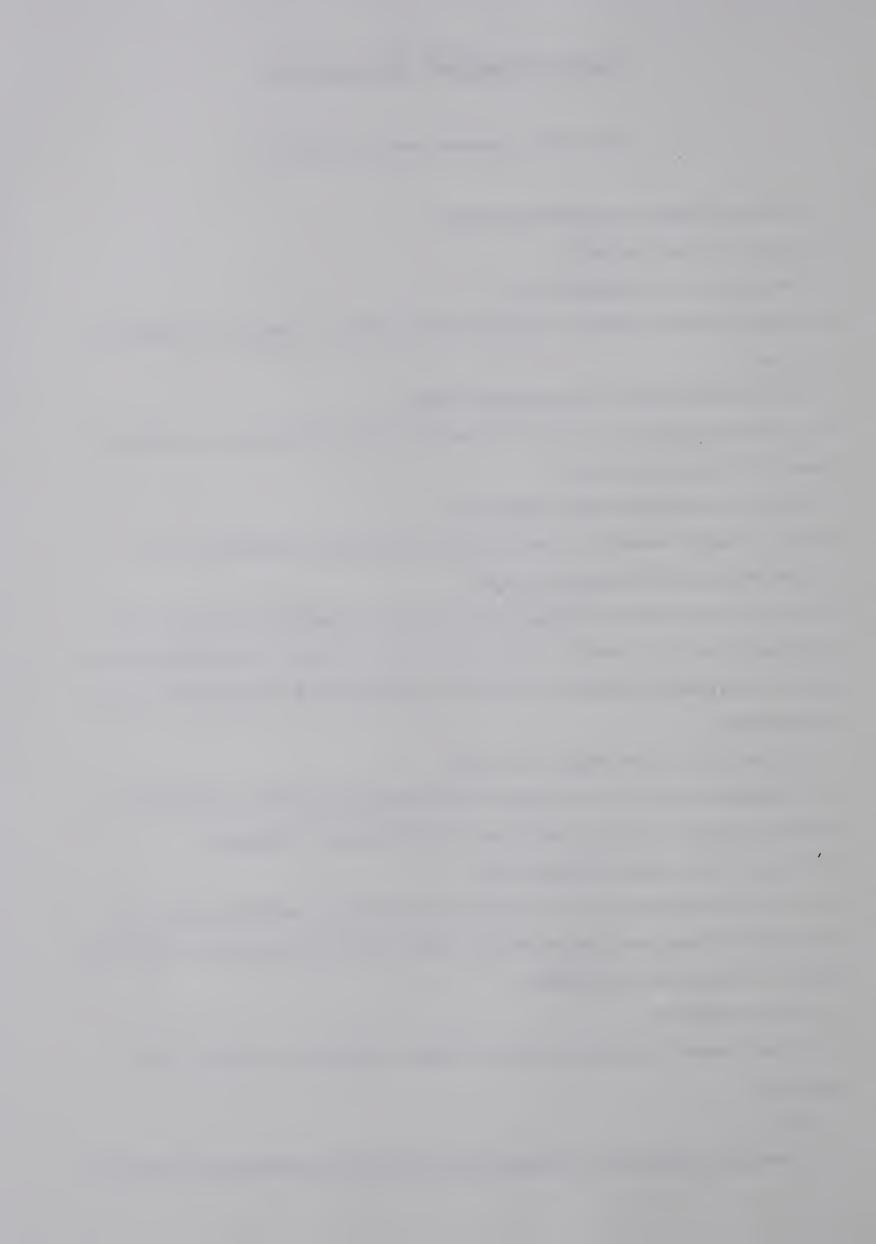
84

SAMPLE TRANSCRIPT AND ANALYSIS

SAMPLE TRANSCRIPT AND ANALYSIS
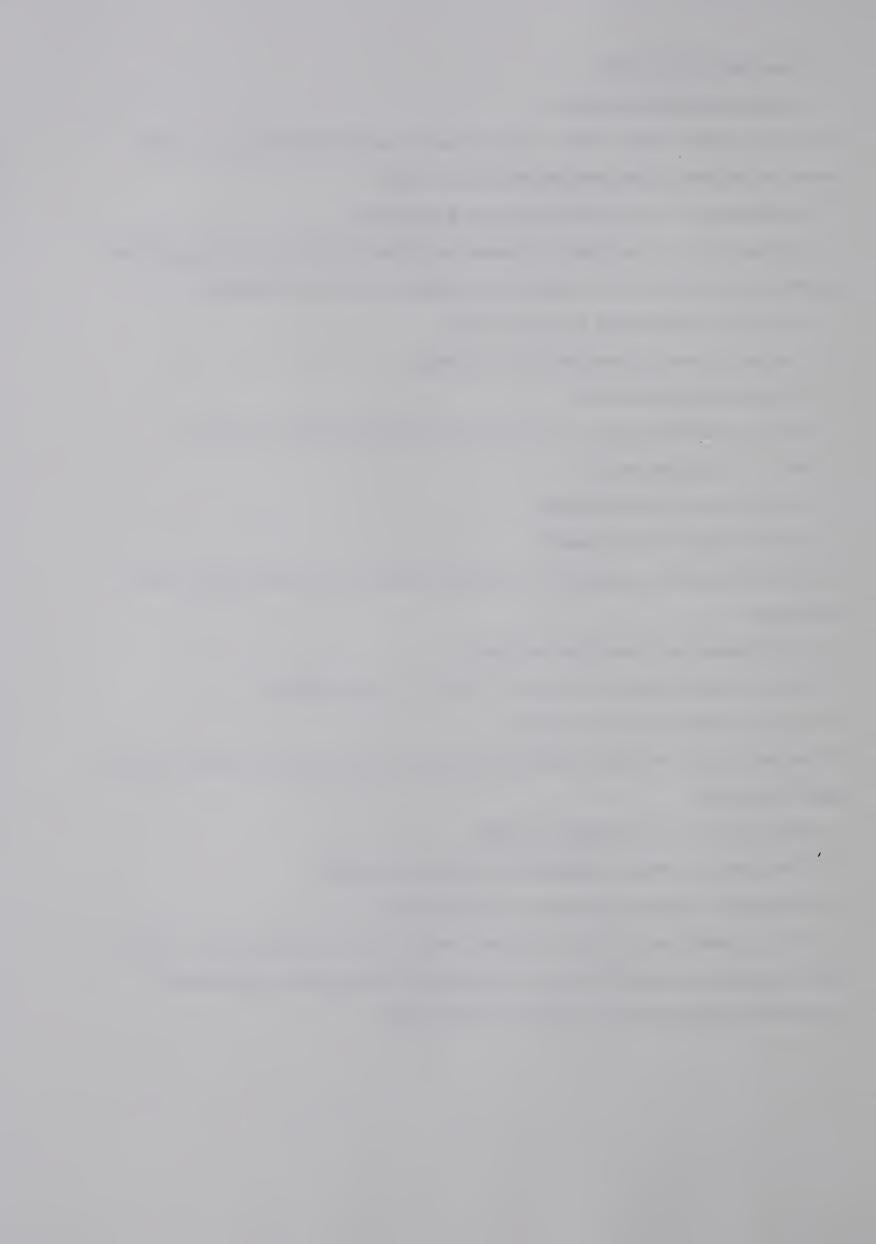
( ) = a unit of analysis or reason for behavior

I – Why was there a boys' line and a girls' line?

R – (That is the way they do it).

I – Why did you use the small play area?

R – (That was the one available). (It depends on the weather), (it was too wet today). (It's too small).

I – Why did you choose a body awareness theme?

R – (They are preparing for a presentation and they will be using these things, different ways of moving, sequences, etc).

I – Did your cooperating teacher suggest this?

R – No, (I thought I would do it), (something that would help). (I decided what to do).

I – Why did you have them start in a circle?

R – Normally I would have a warmup but (it is a small area) and (all they do is crash and bump each other), (from previous experience). (I wanted them to do something) and (we had just done a lesson in science on air) and (I had the balloon) so (I wanted them to do a balloon shape).

I – Why did you sit in the middle of the circle?

R – (I wanted to be central), (to be a part of what was going on). (They would get the feeling of coming in and going out) and (we would all be part of the group).

I – You asked what shape the balloon was?

R – (I saw some of them were not making a circle well) and (I wanted to know if they knew what the shape was). (Maybe they don't know what that shape is). (I didn't have them all year). (I wanted them to be aware).

I – You introduced me.

R – (I think children like to know who is with them). (I wanted to do it when I had their attention).

I – Why?

R – (It may make them more comfortable) and (it gives them an awareness of community).

I – Throughout the lesson you had children sitting on the side then coming back in.

R – (Their behavior was interfering with other students). (I don't like that room), (too many distractions). (Control).

I – Why did you use that method of control?

R – (Because then they can watch) and (focus back on task). (Isolate for a second or two). (It is the method their teacher uses) so (I follow through on what she was doing), (consistency).

I – You used a clap to get attention.

R – (I don't like whistles or yelling). (I like the clap) (to aid in their auditory skills).

I – You also used freeze and stop.

R – (They listen better if you use different signals).

I – Why did you carry your lesson plan?

R – (I wanted to make sure that I was doing what I wanted to do) and (I wanted to have it to pinpoint alternatives) (in case they weren't reacting well), (were off task). (It gave me ideas of what I could switch into).

I – Why did you change into sneakers?

R – (I could slip), (so I could demonstrate) and (it makes me part of the group).

I – There was one child in bare feet.

R – (He doesn't have runners), (that is the rule).

I – Why did you use skipping and hopping?

R – (Because boys don't skip well) and the (hopping was something they could use interchangeably). (The room constricts their movement).

I – You use children to demonstrate.

R – (I think they like it), (it works better as they know the person). (Verbal commands aren't as good as a visual scene).

I – You used a lot of material: directions, levels, etc.

R – (I wanted to see what they could do). (It ties back to their dance presentation).

I – You had them all try the same thing at the same time.

R – (I was hoping they would try it differently) but (they didn't) so (I wanted to guide them that way). (I wanted them to realize they could use one or two feet).

I – You focused on their arms.

R – (They don't do that much).

I – You demonstrated being small.

R – (I felt I wanted to show them) so (they would focus their attention on me). (They seemed to be getting distracted, attention everywhere).

I – You had them all sit and gave instructions at one point.

R – (I wanted them to understand the lesson) and (sometimes the only you can get them to listen is to have them sit). (I wanted to see if they could follow a sequence).

I – You had four demonstrate at the same time.

R – (I wanted to see if it could be done differently).

I – You added pop and explode.

R – (They are words that they know). (They are expressive words), (interesting).

I – Why was that in the lesson?

R – (I don't know). (I can't remember).

I – You then added the time element.

R – (They were getting scattered) so (I wanted to bring them back down again), (slow movements).

I – You interjected with what they were doing.

R – (I like to praise them) and (they like to have their names called out).

I – You used Jeff a lot to demonstrate.

R – (He was "hyper" or edgy today) and (was having trouble containing himself) so (it was better to use him).

I – Why did you pick the activities you did?

R – (Linking them to dance). (The room). (I didn't want accidents).

I – Were there any other influences on your behavior?

R – (I try to relate to what I like to do), (how I feel that day). (Things I did when I was a child). (Things that I enjoyed). (I want to see originality). (It depends on the acitivity). (Awareness). (I want them to do things for themselves).

APPENDIX F

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MATERIALS RETURNED TO RESPONDENT

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P. O. Box 4302

South Edmonton

Alberta, T6E 4T3

Dear :

Thank you so much for allowing me to observe your physical education classes and to interview you about the influences on and reasons for your teaching behavior. I appreciate your cooperation in helping me to complete my doctoral research.

You will find enclosed the transcripts of our interviews. Please feel free to add, delete or alter them to best represent your thoughts on the subject. At the end of each interview there is a space for adding any comments or other variables which may have influenced your behavior. Also included is a list of the variables which you mentioned in the interview as influencing your teaching behavior. Please consider this list carefully and add any other variables which might influence your behavior. You are then asked to list and priorize the ten most influential variables. The last page is a questionnaire which I would appreciate you completing and returning separately in the enclosed white self addressed envelope. This ensures that I will not be aware of the identity of the respondent. The interview transcripts and list of variables can be returned in the stamped self addressed brown envelope. I would appreciate your earliest response in returning the transcripts.

Should you have any questions concerning your role in this research project or about the above instructions please do not hesitate to call me at home at 487-4041.
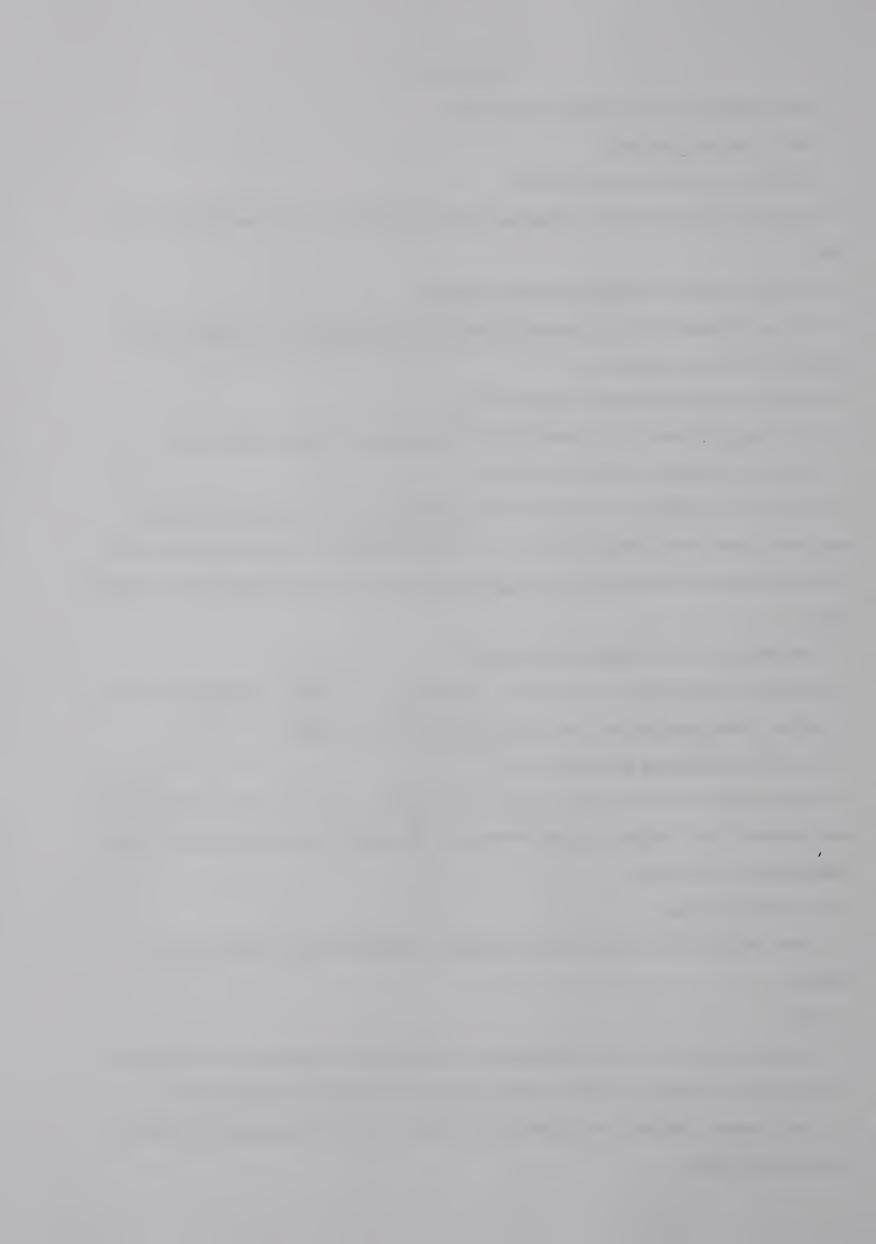
Thank you again for your help in this project.

Yours truly

Catherine E. Campbell

Interview 1

I — Why was there a boys' line and a girls' line?

R — That is the way they do it.

I — Why did you use the small play area?

R — That was the one available. It depends on the weather, it was too wet today. It's too small.

I — Why did you choose a body awareness theme?

R — They are preparing for a presentation and they will be using these things, different ways of moving, sequences, etc.

I — Did your cooperating teacher suggest this?

R — No, I thought I would do it, something that would help. I decided what to do.

I — Why did you have them start in a circle?

R — Normally I would have a warmup but it is a small area and all they do is crash and bump each other, from previous experience. I wanted them to do something and we had just done a lesson in science on air and I had the balloon so I wanted them to do a balloon shape.

I — Why did you sit in the middle of the circle?

R — I wanted to be central to be a part of what was going on. They would get the feeling of coming in and going out and we would all be part of the group.

I — You asked what shape the balloon was?

R — I saw some of them were not making a circle well and I wanted to know if they knew what the shape was. Maybe they don't know what that shape is. I didn't have them all year. I wanted them to be aware.

I — You introduced me.

R — I think children like to know who is with them. I wanted to do it when I had their attention.

I — Why?

R — It may make them more comfortable and it gives them an awareness of community.

I — Throughout the lesson you had children sitting on the side then coming back in.

R — Their behavior was interfering with other students. I don't like that room, too many distractions. Control.
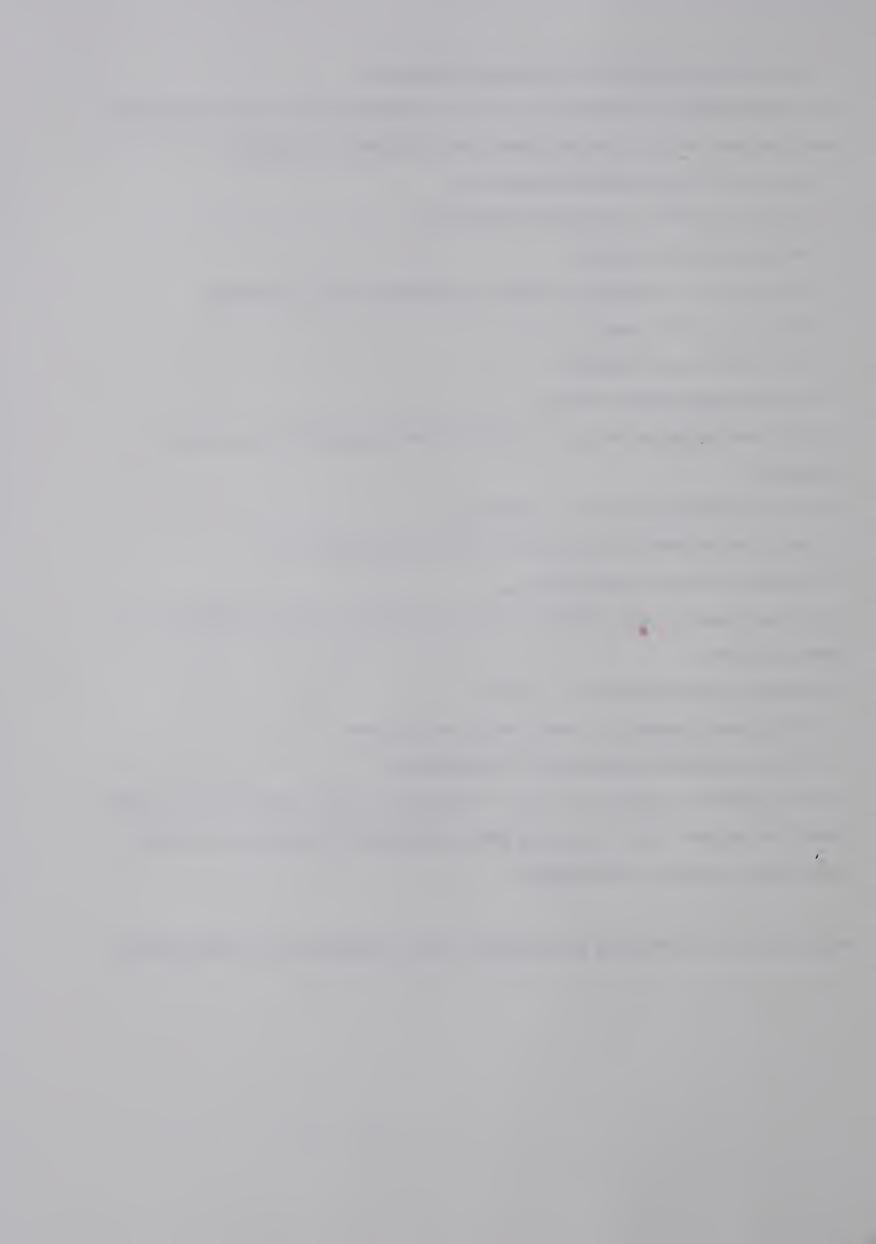
I – Why did you use that method of control?

R – Because then they can watch and focus back on task. Isolate for a second or two. It is the method their teacher uses so I follow through on what she was doing, consistency.

I – You used a clap to get attention.

R – I don't like whistles or yelling. I like the clap to aid in their auditory skills.

I – You also used freeze and stop.

R – They listen better if you use different signals.

I – Why did you carry your lesson plan?

R – I wanted to make sure that I was doing what I wanted to do and I wanted to have it to pinpoint alternatives in case they weren't reacting well, were off task. It gave me ideas of what I could switch into.

I – Why did you change into sneakers?

R – I could slip, so I could demonstrate and it makes me part of the group.

I – There was one child in bare feet.

R – He doesn't have runners, that is the rule.

I – Why did you use skipping and hopping?

R – Because boys don't skip well and the hopping was something they could use interchangeably. The room constricts their movement.

I – You use children to demonstrate.

R – I think they like it, it works better as they know the person. Verbal commands aren't as good as a visual scene.

I – You used a lot of material: directions, levels, etc.

R – I wanted to see what they could do. It ties back to their dance presentation.

I – You had them all try the same thing at the same time.

R – I was hoping they would try it differently but they didn't so I wanted to guide them that way. I wanted them to realize they could use one or two feet.

I – You focused on their arms.

R – They don't do that much.

I – You demonstrated being small.

R – I felt I wanted to show them so they would focus their attention on me. They seemed to be getting distracted, attention everywhere.
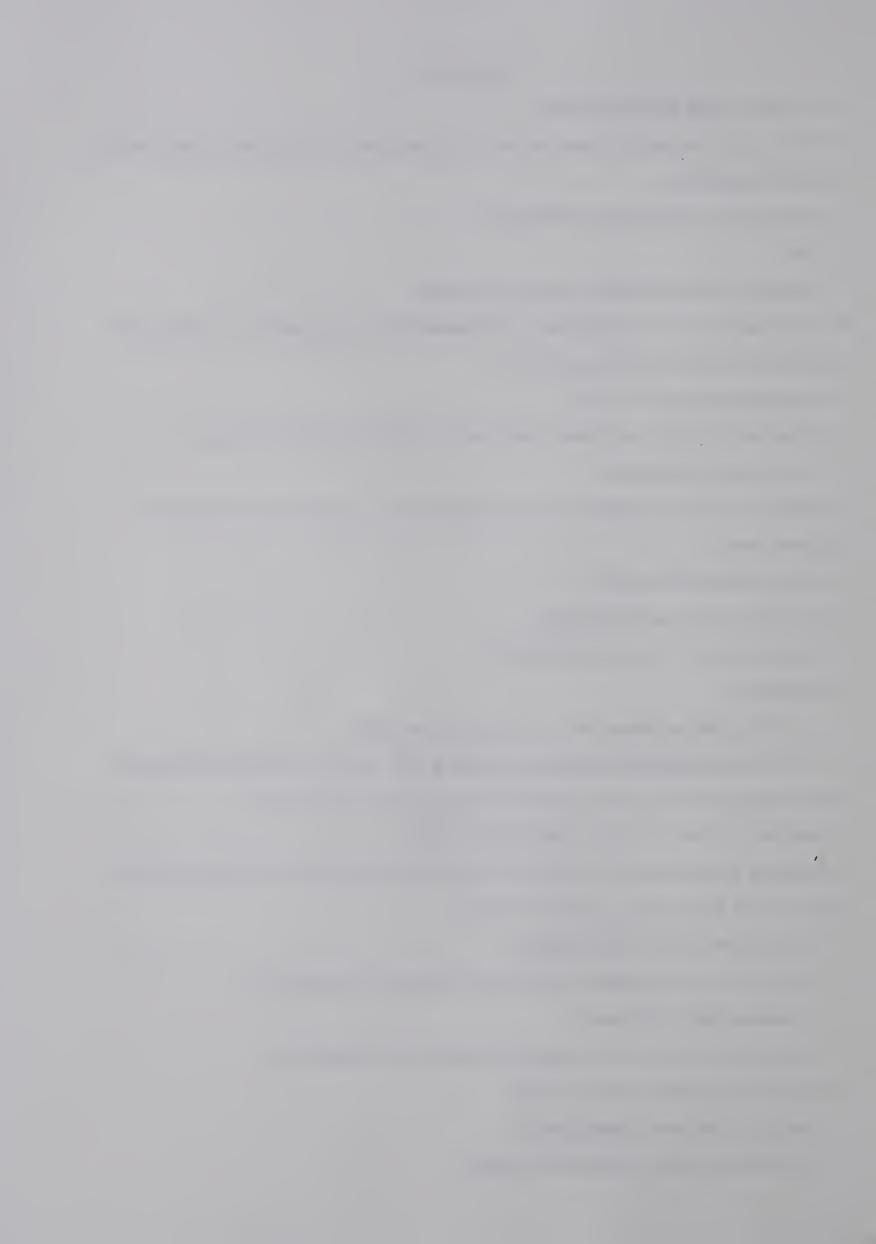
I – You had them all sit and gave instructions at one point.

R – I wanted them to understand the lesson and sometimes the only you can get them to listen is to have them sit. I wanted to see if they could follow a sequence.

I – You had four demonstrate at the same time.

R – I wanted to see if it could be done differently.

I – You added pop and explode.

R – They are words that they know. They are expressive words, interesting.

I – Why was that in the lesson?

R – I don't know. I can't remember.

I – You then added the time element.

R – They were getting scattered so I wanted to bring them back down again, slow movements.

I – You interjected with what they were doing.

R – I like to praise them and they like to have their names called out.

I – You used Jeff a lot to demonstrate.

R – He was "hyper" or edgy today and was having trouble containing himself so it was better to use him.

I – Why did you pick the activities you did?

R – Linking them to dance. The room. I didn't want accidents.

I – Were there any other influences on your behavior?

R – I try to relate to what I like to do, how I feel that day. Things I did when I was a child. Things that I enjoyed. I want to see originality. It depends on the acitivity. Awareness. I want them to do things for themselves.

Please insert any comments or other variables which influenced your teaching behavior.
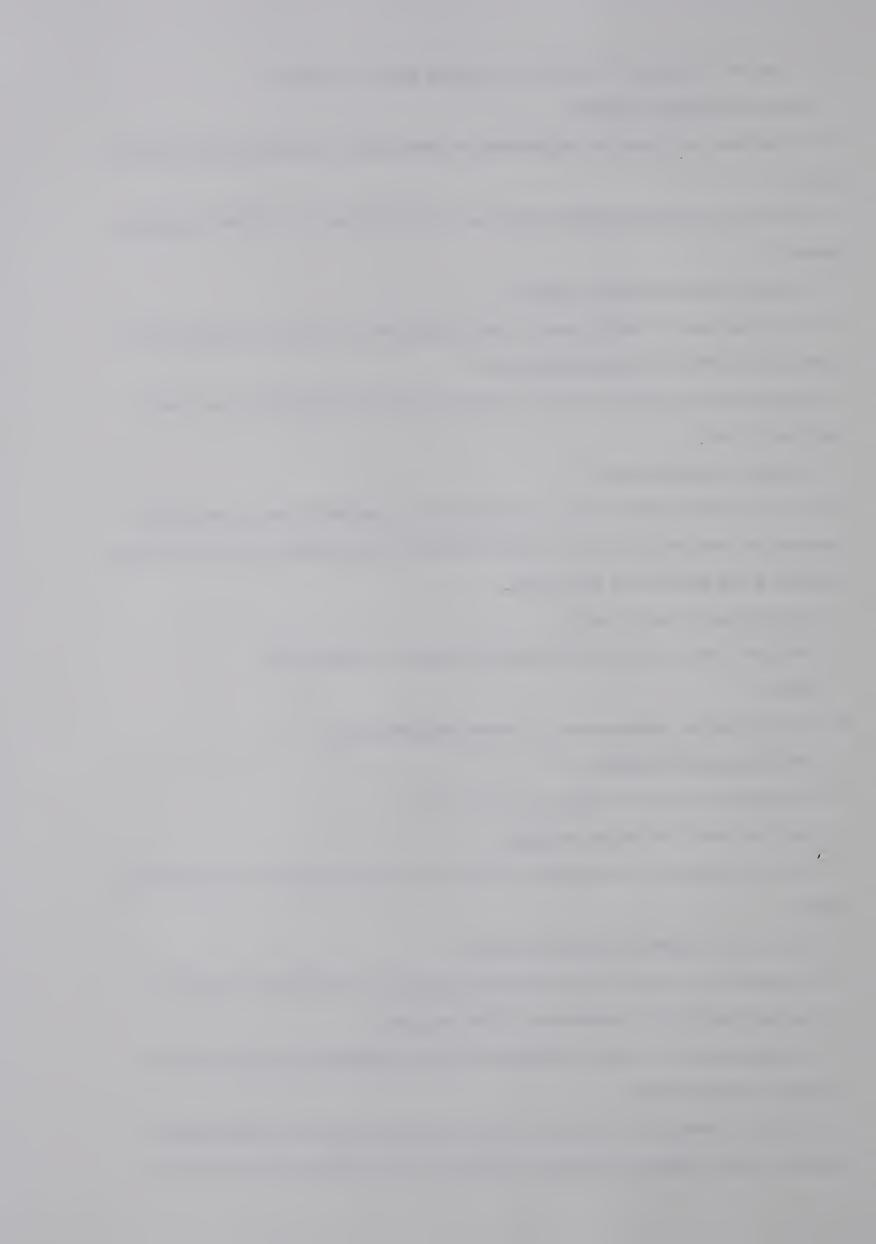
Interview 2

I - You were doing different shapes.

R - They are still not putting together their own ideas, they mimic too much, they need to use their imaginations.

I - Is this why you emphasized "different"?

R - Yes.

I - Why did you then switch to specific directions?

R - I realized they were having trouble and needed some extra guidance. I wanted them to practice and realize what they could do.

I - Why did you focus on levels?

R - They tend to follow each other. They need to understand there is medium.

I - You worked on body parts.

R - Some of them are not clear on that concept, and it is a way to get them to the different levels.

· I - Why hiding the body part?

R - By hiding it they had to get down.

I - Why were you in the gymnasium today?

R - Assigned.

I - You interjected by telling them what others were doing.

R - I want them to be aware that some are doing well – praise I want them to see and look at what others are doing, to give them ideas, to further something.

I - Why do you think it is important to praise them?

R - Because they will not know if they are doing something right or wrong if you don't praise them. It gives them a good self concept.

I - You had them move to open spaces.

R - They tend to crowd. Safety. They need to learn this for gymnastics.

I - You used a clap for attention.

R - They are starting to learn the signal. It seems to be the best way.

I - Why don't you like to use your voice?

R - Because it becomes a yelling match.

I - You told them how you liked their behavior.

R – I think they should get recognition. It inspires them to continue.

I – You used a scatter formation.

R – I tried lines and it was too regimented so I went back to scatter because it seems better.

I – One time you gave instructions when they were still spread out rather than calling them in.

R – I thought they were nicely spaced.

I – You talked about different ways of moving high and then ways of being low but it turned out locomotion high and balance low.

R – My intent was to move in both but either they weren't understanding or I wasn't explaining it well.

I – You demonstrated yourself.

R – I noticed there were a number not doing it and occasionally I like to use myself because then they will all focus on it and sometimes if the students do it not everyone watches. It also adds variety and change.

I – You got them to move quietly.

R – Because I was trying to get them quiet as they work loud usually.

I – Why?

R – To get them to realize there are different options available.

I – Why did you use the giant?

R – I thought it would work. They are familiar with it.

I – You used one of the kids as the giant.

R – He tends to stay out in the corners and it was a chance to get him in the centre of things.

I – Why choose a student to go in the middle?

R – I thought they would not jump over him, I hoped they would sneak around him.

I – You had three children demonstrate at the same time.

R – I wanted to see three because time was running out and they would see variety.

I – You turned off the lights.

R – I thought it would slow things down. Then I decided to go with something else because it wasn't working, it was me or the kids or the combination but it was off.
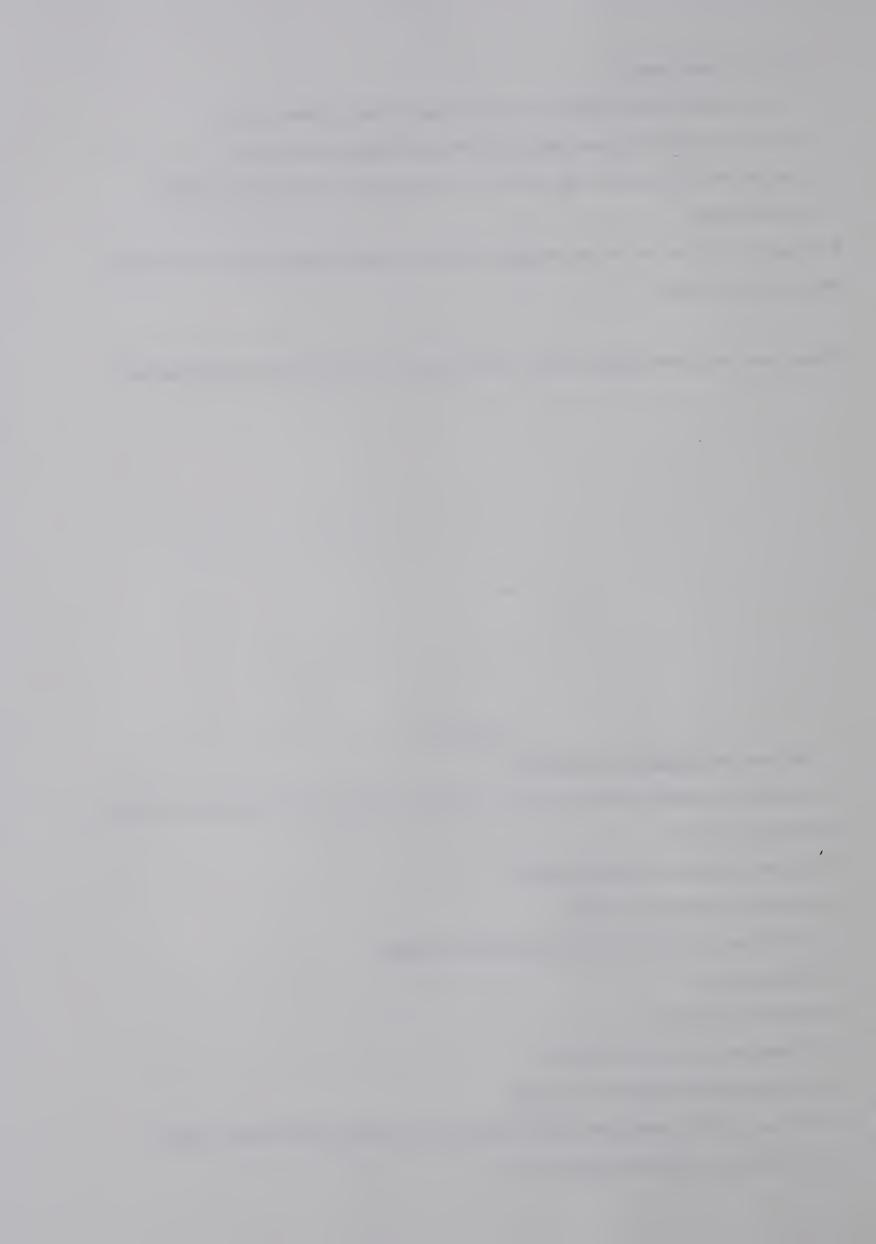
I – Why the leprechauns?

R – Theme, it is St. Patrick's Day and we have been drawing them in class.

I – You had the girls line up as a group but the boys lined up one by one.

R – Because the boys want to be first and race so I purposefully held some back.

I – Anything else?

R – I have a cold, so I wasn't as energetic. My voice wasn't going to carry if I did a loud thing. Their mood too.
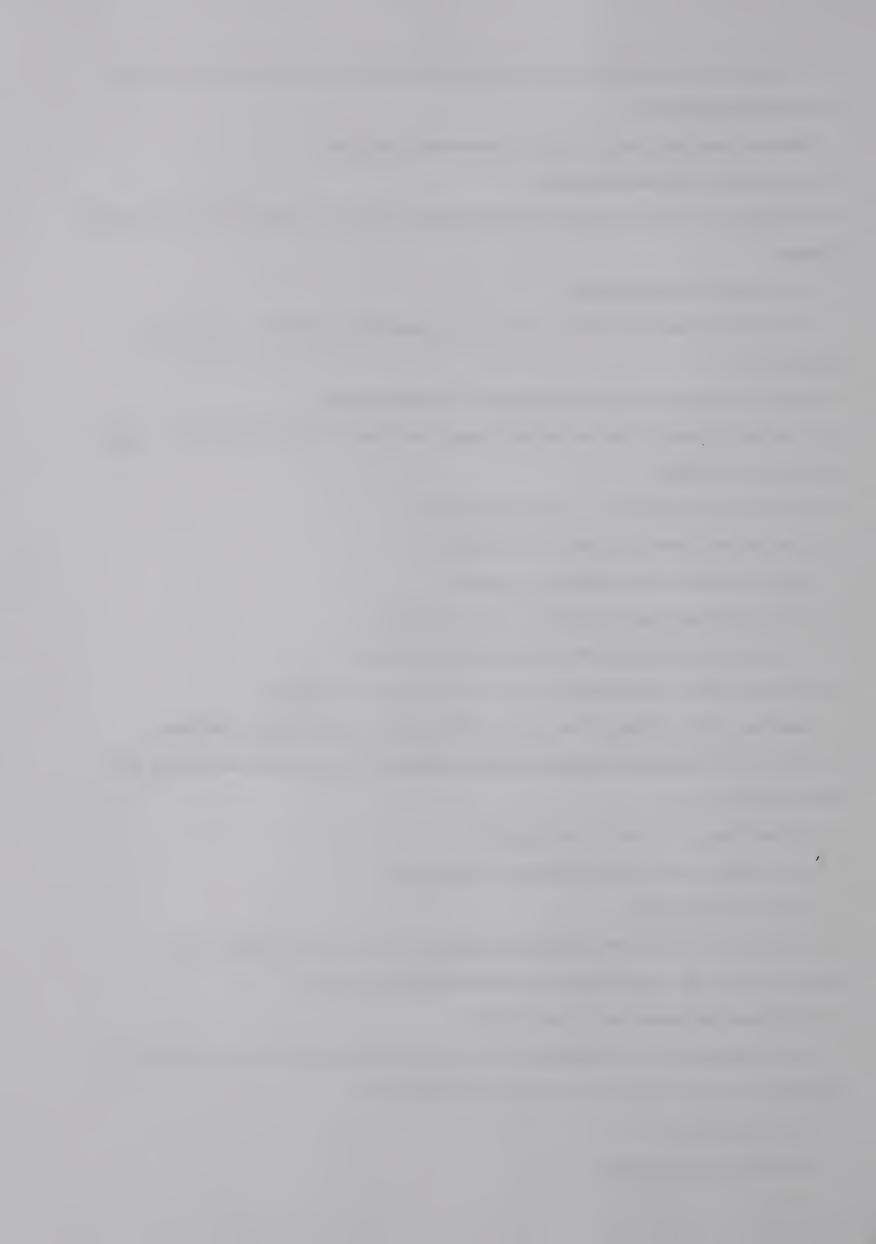
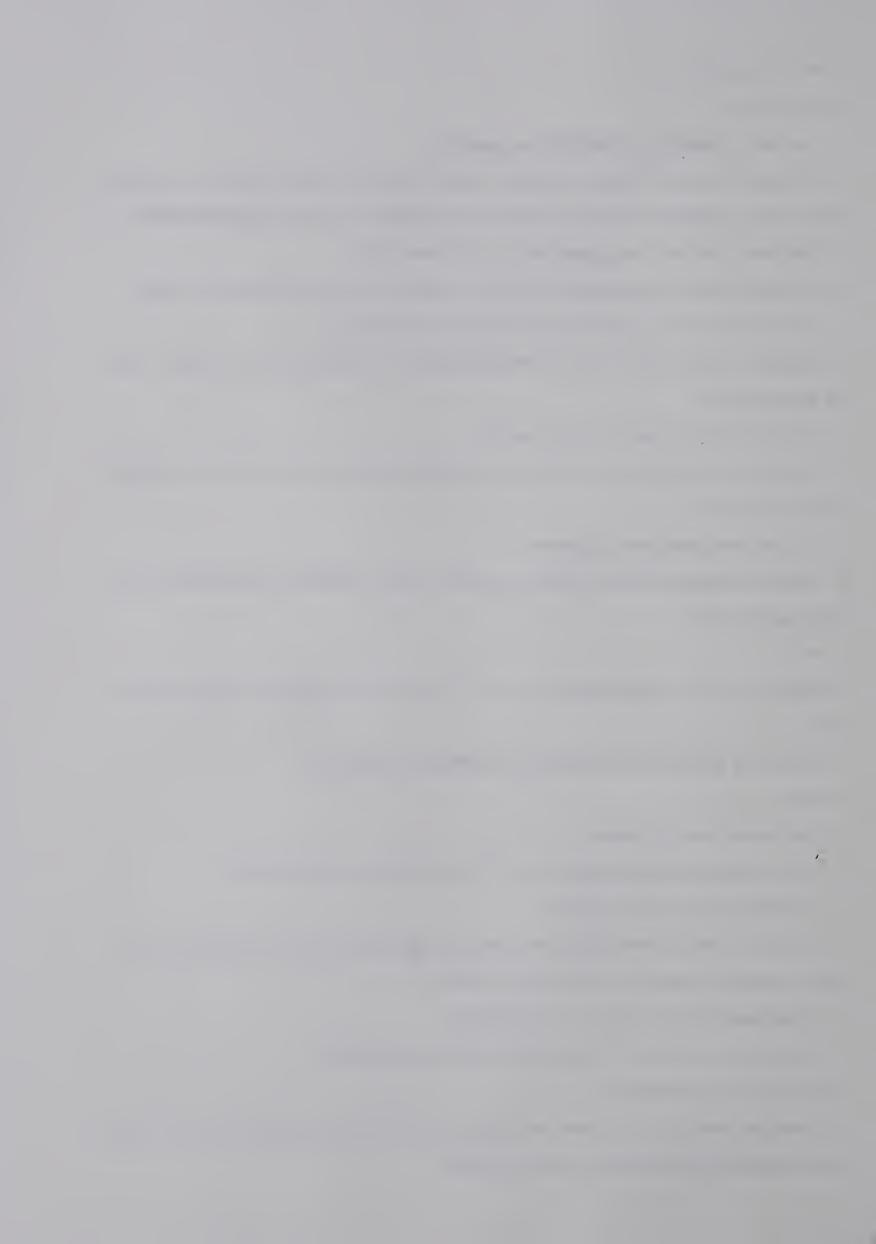Please insert any comments or other variables which influenced your teaching behavior.

Interview 3

I – What was the objective of the class?

R – I wanted to familiarize them with the equipment, handling it and doing different things with different objects.

I – Why the change from other lessons?

R – Boredom, something different.

I – How did they know to run when they got in the gym?

R – They always do.

I – Why did you do that?

R – Because they were up in the air.

I – You concentrated on their own space.

R – They were still crowding and I don't want them to bump into each other, safety.

I – You had them doing shapes, speed, etc.

R – I wanted to use up energy, to slow them down a bit so they could hear what I said.

I – Why the graveyard?

R – Because they like it, we do it in the classroom sometimes.

I – Why the stiff-legged movement?

R – I was trying to give the impression of different ways and a zombie, they haven't used it before.

I – You worked with the children.

R – I hadn't done much of it before and I would guide them directly as some weren't doing it right.

I – You asked if they remembered how to get out the benches.

R – I wanted to know if I had to explain it again. I saw they could do it and I knew which children were involved.

I – Why did you use the same setup as yesterday?

R – It would have taken too long if we changed it.

I – Did you use the same activities as yesterday?

R – The same except I gave them more ideas and detail.

I – Why did you get specific kids to put the equipment out.

R – The ones I took with me were the ones likely to get into trouble.

I – There were some sitting in the middle of the room while you got out the mats.

R – They haven't caught on to the mat thing, I didn't want to run them over, safety, get them out of the way.

I – Did you have purposes for each station?

R – Yes – Balance, total body movement, manipulative.

I – Why those objectives?

R – Those are the things they have been building up to and they seemed to fall in, sequence. They work well together and the children enjoy them.

I – Was there any reason why those groups?

R – They happened to be standing there according to size and ability; they seemed to fit together; and were in groups they were comfortable with.

I – Why three groups?

R – Because I had three units.

I – Why three units?

R – No reason.

I – You went to each group and gave suggestions.

R – If I saw them go off task or run out of ideas and doing the same thing over and over that is when I wanted to interject and implement changes. I wanted to give them ideas.

I – One time at the mats you gave them specific rolls to do.

R – At first I thought they should do that then I realized they had limbered up already.

I – With the next group you gave them different instructions.

R – Because I wanted them to do something different, sometimes they just follow what the last group did.

I – Why did you want them to name the roll?

R – Sometimes putting names to things is interesting and they will remember it better as it is personalized.

I – You had one group think of games.

R – Because there were more things you could do with a hoop and I wanted them to try some partner work.

I – Why?

R – Because they were doing individual work. They should realize they could do group work.

I – Is that why you had the boys working together on the bench?

R – Yes.

I – You concentrated on shapes.

R – That is something they could do more of and it blends in with balance.

I – You demonstrated some shapes.

R – I wanted to show them quickly as I wanted to go to the other two stations. It was easier, especially when you are pressed for time.

I – Where did you get the ideas for the stations?

R – Out of my own head or from books. I suited it to this class.

I – Why did you use stations?

R – I wanted them to work in their own areas and concentrate on what they were doing without being distracted by the rest of the class.

I – Anything else?

R – The weather, the children were at a higher energy level.

Please insert any comments or other variables which influenced your teaching behavior.

The following section is a list of the variables you have mentioned in the three interviews as influencing your teaching behavior. Please review these and note any other variables which might have influenced your behavior. These should be listed in the next section.

the children

not doing what I wanted, off task

it would be chaos

it makes it personal

children interfering with other children, disrupting class

children tend to crowd together

children copy

they could do more

children distracted

children discouraged

children energetic

children excited

children will remember

children not responding well

children responding very well

child doing activity well

children will feel more comfortable

they will have a good self-concept

they can't do it well

they weren't coming up with ideas

child needs attention

children's response

children having problems

children not understanding

children had finished activity

first time with this activity

they are familiar with the activity

children don't do this

children like recognition and praise

they like it

all doing it the same way

children's size

children's mood or attitude

children's level and experience

find out their level and experience

children need to realize what they can do

children should be able to make their own decisions

children need to use their imaginations

children listen better if you use a variety of cues

activity boring

the class was off that day

I chose to do it

my prior experience with the activity

ideas, beliefs, philosophy

my expectation

it came out of my head

me

personal preference

I am not familiar with the children

I'm trying something different

my mood

I've been sick

the things I enjoyed and did as a child

I'm tired

no reason

I don't know

I forgot

I like it, it's fun

I do not like it

I haven't done this before

I was going to be active

I didn't explain it well

I like to be included in the lesson, to participate

I want to be part of the class

it saves my voice

my voice doesn't project

I wanted them to be able to hear

it works

it didn't work

it wasn't working

I thought it would work better

it was the best way

it is logical

I wanted to finish the activity

books

school procedures and policy

class procedures and policy

the children are used to it that way

cooperating teacher does it this way

other experiences throughout day

result of last lesson

activity in the last lesson

continue in gym what working on in class

want a certain activity

the activity

I expected a certain response

they could see me

I wanted to show them

wanted them to see it

a picture is worth a hundred words

wanted to see what they could do

to watch other children

they should learn how to take out, care for equipment

size of gym

the environment

wanted to give them the experience

wanted them to experiment, explore

for variety

something different

point out key points

give examples

try different things

give them ideas

give me ideas

give them directions

sequence/progression of material

fits in with activity

develops skills

gets the point across

following my plan

pinpoint alternatives

important aspect of activity

important basic activity

theme for the day

objective of lesson

activity needed later in lesson or unit

control or classroom management

cues

running out of time

would take too much time

wanted it done quickly

safety

giving recognition and praise

helping

makes it easier

it was interesting

wanted to use audio cues

check for understanding

awareness

for understanding

too many distractions

calming activity

convenience

encouragement

motivation

preventative

guidance

feedback

practice

burn off energy

change of pace

give them a focus

expand the activity

consistency

to be creative, some independence without directions from me

use their imagination

for togetherness as a group

bring them back on task

familiar with who is in room

the weather

gives them a feeling of community

he does not have the proper footwear

child does not participate well

get the child active

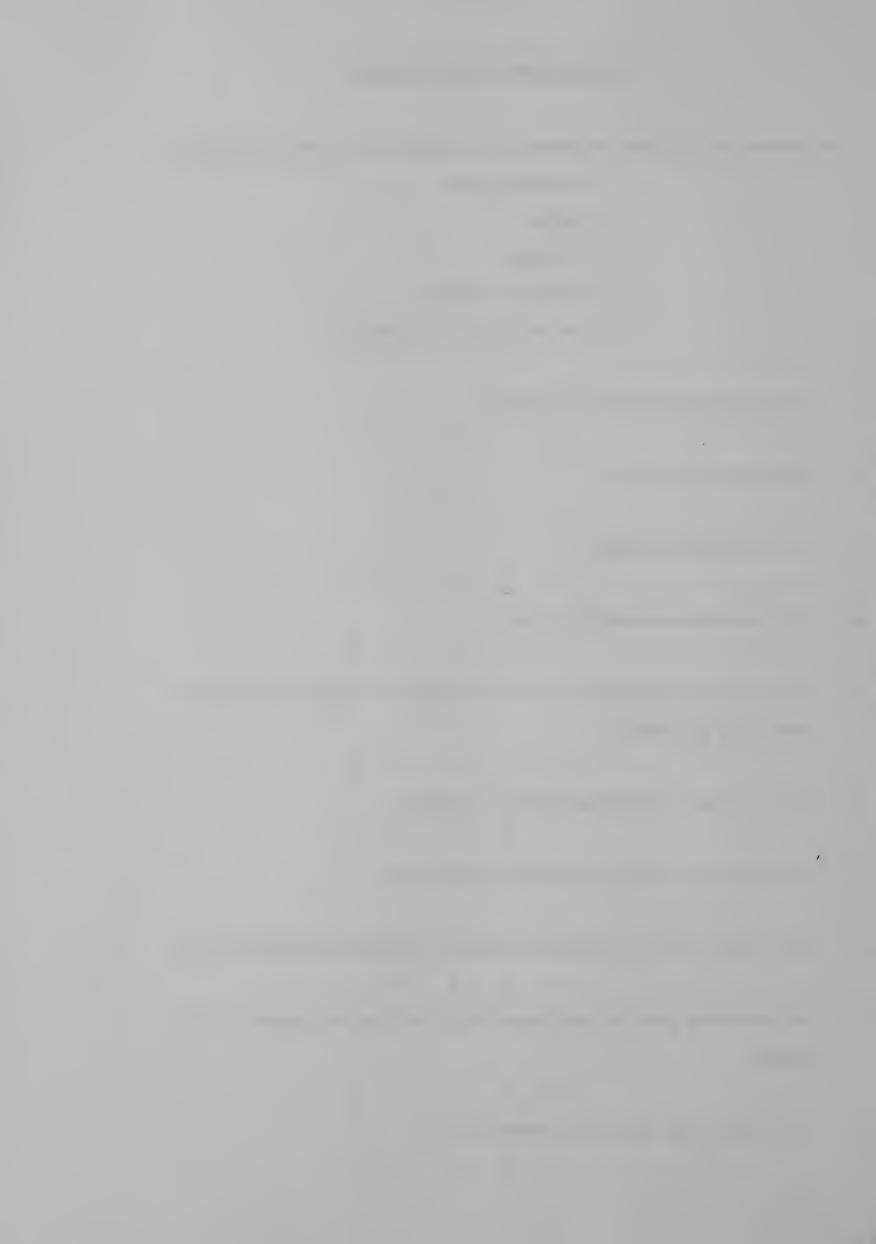I knew which children were involved

I suit the activity to the class

Please list any other variables which influence your behavior.

     a.

     b.

     c.

     d.

     e.

     f.

     g.

     h.

     i.

     j.

Please list and priorize what you feel are the ten most important variables which influence your behavior, the number one indicating the variable with the greatest influence.

1.

2.

3.

4.

5.

6.

7.

8.

9.

10.

RESPONDENT QUESTIONNAIRE

Circle the number which best represents your reaction to the following statements.

1 – strongly agree

2 – agree

3 – disagree

4 – strongly disagree

5 – do not know or no opinion

1. I understood all the interview questions.

    1   2   3   4   5

2. My answers were frank

    1   2   3   4   5

3. The questions were biased.

    1   2   3   4   5

4. The interviewer appeared to be neutral.

    1   2   3   4   5

5. The interview was adequate to cover the variables I thought were important in determining my behavior.

    1   2   3   4   5

6. I answered each question as honestly as possible.

    1   2   3   4   5

7. The interviewer suggested a particular point of view.

    1   2   3   4   5

8. Other respondents will interpret the interview questions the same way I did.

    1   2   3   4   5

9. The interviewer gave me ample opportunity to express my reasons for my behavior.

    1   2   3   4   5

10. The interview was fair and free from prejudice.

    1   2   3   4   5

APPENDIX G

106

SCOTT COEFFICIENT "PI"

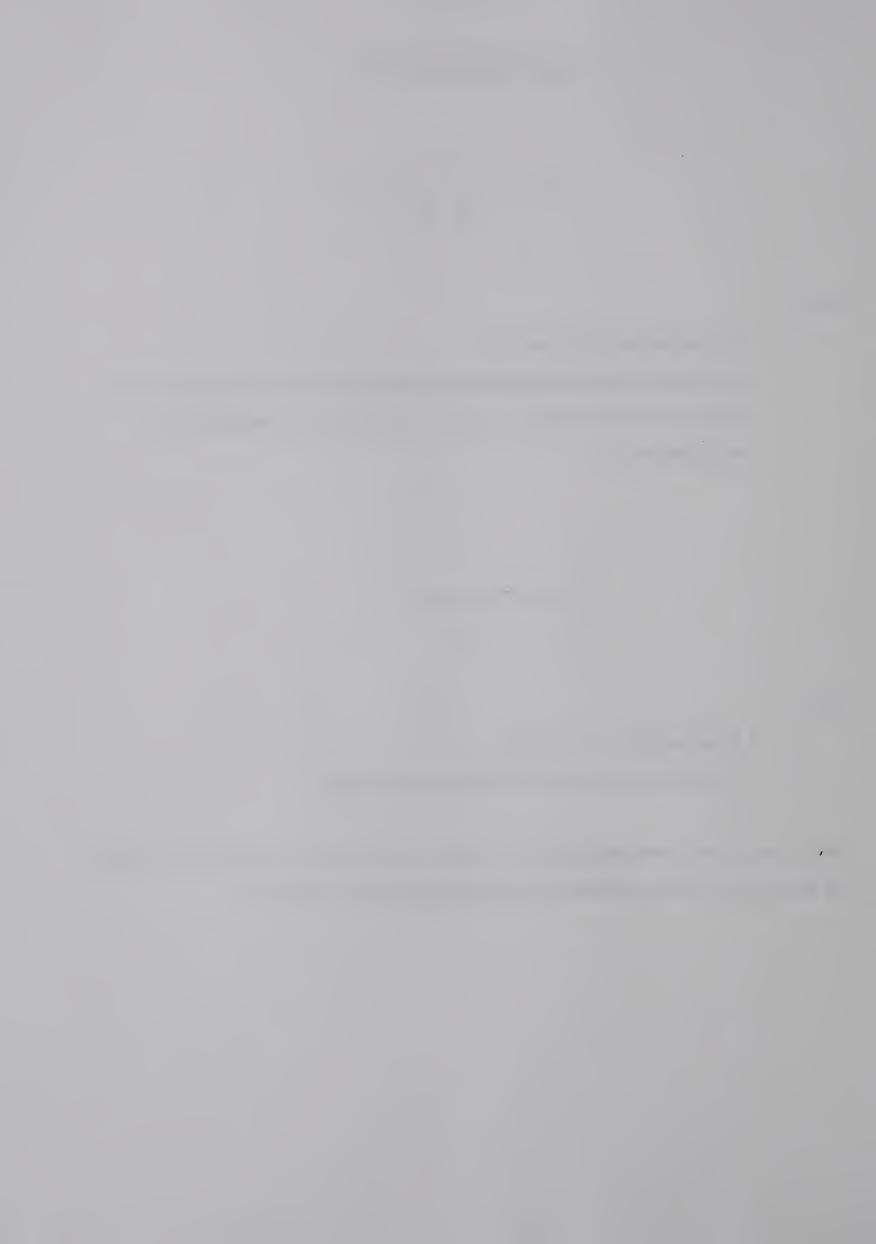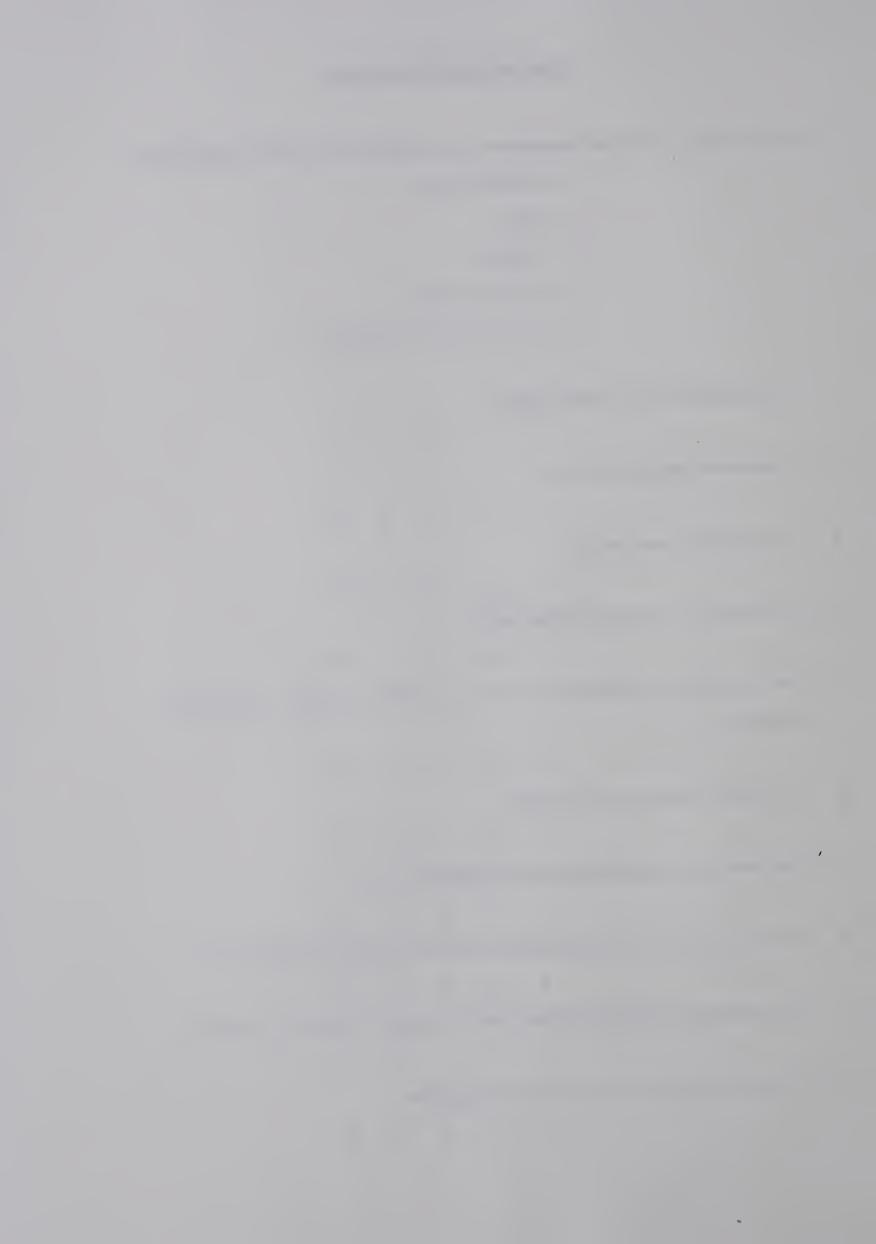# SCOTT COEFFICIENT "PI"

$$Pi = \frac{Po - Pe}{100 - Pe}$$

where:

a. Po is the percentage agreement,

b. Pe is the percentage agreement expected by chance found by squaring the proportion of tallies in each category, summing over all categories and multiplying by 100.

$$Pe = 100 \sum_{i=1}^{k} Pi^2$$

where:

a. k is the number of categories,

b. Pi is the proportion of tallies falling in each category.

Scott's coefficient is the amount that two coders exceeded chance agreement divided by the amount that perfect agreement exceeds chance (Flanders, 1966:13).

APPENDIX H

REVIEWER QUESTIONNAIRE

REVIEWER QUESTIONNAIRE

Circle the number which best represents your reaction to the following statements.

1 – strongly agree

2 – agree

3 – disagree

4 – strongly disagree

5 – do not know or no opinion   ,

1.   The questions were understandable.

1   2   3   4   5

2.   The answers appeared frank.

1   2   3   4   5

3.   The questions were biased.

1   2   3   4   5

4.   The interviewer appeared to be neutral.

1   2   3   4   5

5.   The interview was adequate to cover the variables important in determining

behavior.

1   2   3   4   5

6.   The answers appeared to be honest.

1   2   3   4   5

7.   The interviewer suggested a particular point of view.

1   2   3   4   5

8.   Other respondents will interpret the interview questions the same way.

1   2   3   4   5

9.   The interviewer gave ample opportunity to express reasons for behavior.

1   2   3   4   5

10.   The interview was fair and free from prejudice.
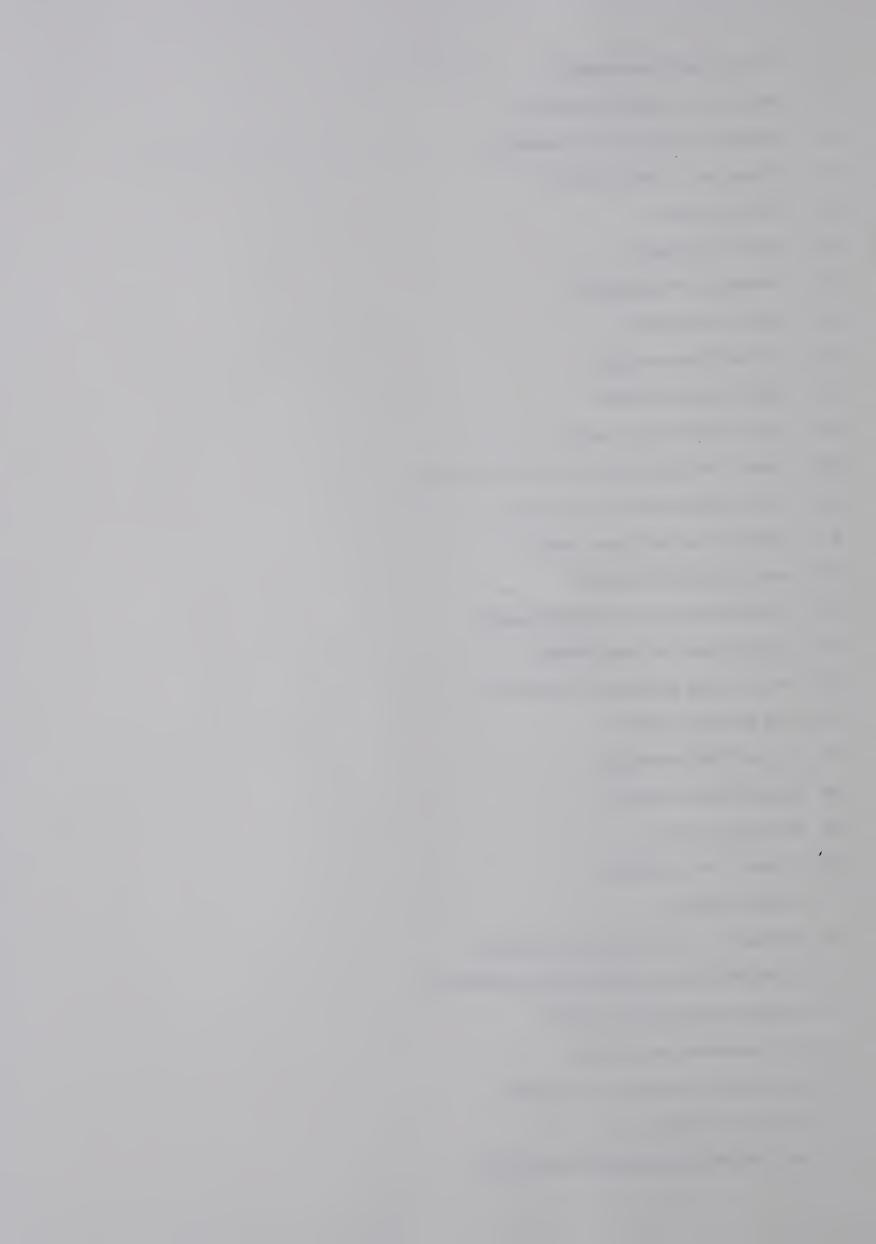
1   2   3   4   5

APPENDIX I

UNITS GENERATED

UNITS IDENTIFIED

The number in brackets represents the number of occurrences of that unit.

1. the children (10)

2. anticipated response(11)

3. first time with this class (2)

4. they asked for it (2)

5. children complained(2)

6. children not off task(1)

7. not doing what I wanted, off task(9)

8. it would be chaos(6)

9. it was a little chaotic(1)

10. it makes it personal(1)

11. unacceptable behavior(1)

12. children not disrupting class(1)

13. children interfering with other children/disrupting class (2)

14. work better with members of their own sex(1)

15. manners(3)

16. they do not work well in groups(3)

17. children know they will get a turn(1)

18. children paying attention(2)

19. children not paying attention(7)

20. children tend to crowd together(2)

21. children copy(3)

22. they could do more(1)

23. children distracted(1)

24. children discouraged(1)

25. children energetic(7)

26. children excited(4)

27. children will remember(3)

28. children didn't remember(6)

29. children not responding well(11)

30. children not doing what I wanted(3)

31. children work better alone(1)

32. children noisy(1)

33. children decided(1)

34. children will misbehave(3)

35. child volunteered(1)

36. children misbehaving(5)

37. keeps children busy(3)

38. most of them were quiet(1)

39. childen should not suffer because of some(1)

40. some children did not have a turn(1)

41. children responding very well(9)

42. child doing activity well(4)

43. children will feel more comfortable(3)

44. it would have confused them(4)

45. they will have a good self-concept(4)

46. they can't do it well(1)

47. they will feel success(7)

48. they will feel secure(1)

49. they can do it(5)

50. children find it easier(1)

51. children tired(1)

52. not sure of what response would be(1)

53. child's response was interesting, different(2)

54. children doing activity wrong(1)

55. their response was slow(3)

56. they weren't coming up with ideas(2)

57. child needs attention (2)
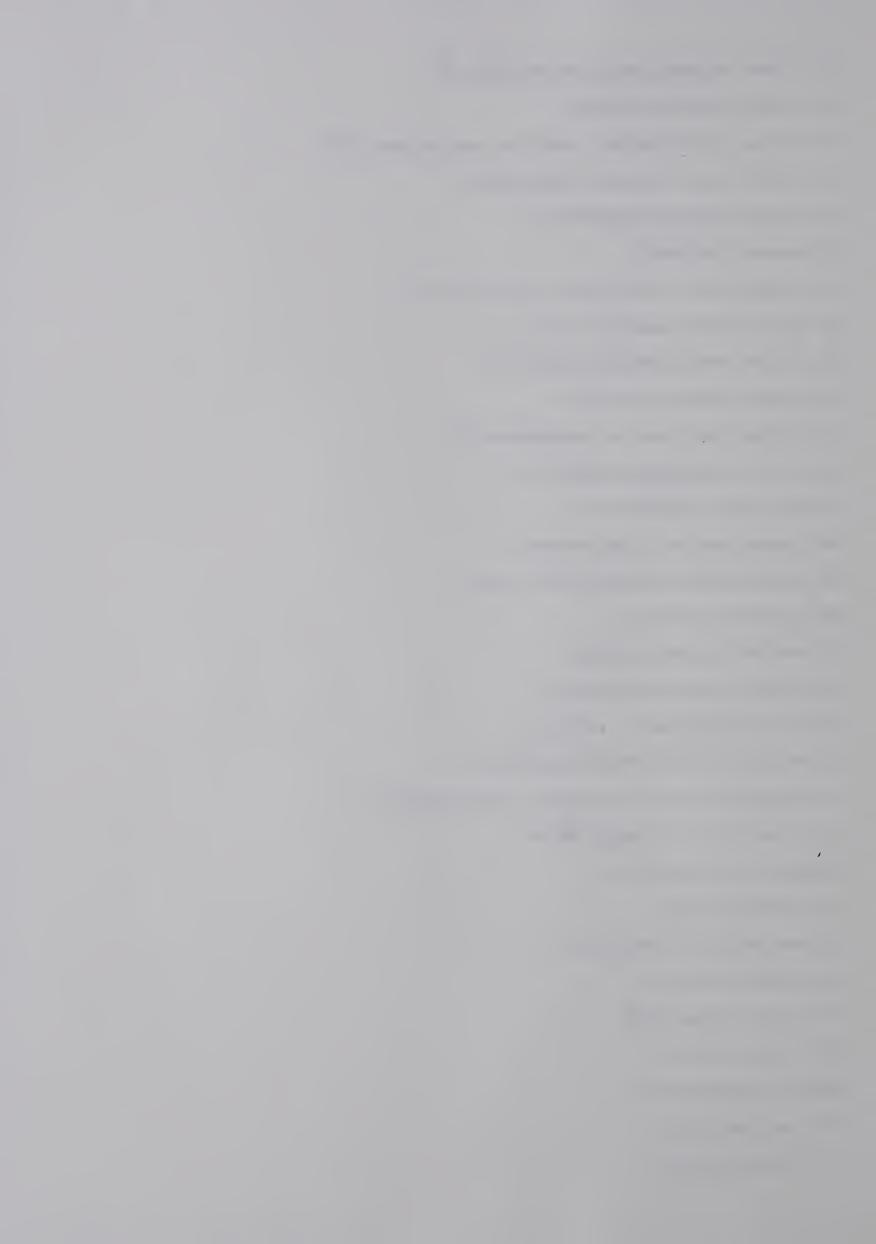
58. they needed to change their behavior(1)

59. more children are active(1)

60. I thought they knew that(1)

61. they were fidgity(3)

62. not the expected response(3)

63. expected student behavior(9)

64. they could show what I wanted (8)

65. children's response (14)

66. their behavior (15)

67. children having problems (4)

68. children need to listen (1)

69. children not listening (6)

70. children talking (1)

71. they deserved it (1)

72. the children will pick up what I am doing (2)

73. children not acting cooperatively (2)

74. minimizes problems (1)

75. they had finished something (2)

76. children not understanding (16)

77. children needed help (8)

78. they haven't had enough experience (5)

79. one groups of children better than others (5)

80. children had not finished activity (1)

81. children had finished activity (1)

82. children could identify with it (7)

83. children's habit (1)

84. first time with this activity (11)

85. give them something they are familiar with (3)

86. they are not familiar with the activity (10)

87. they are familiar with the activity (26)

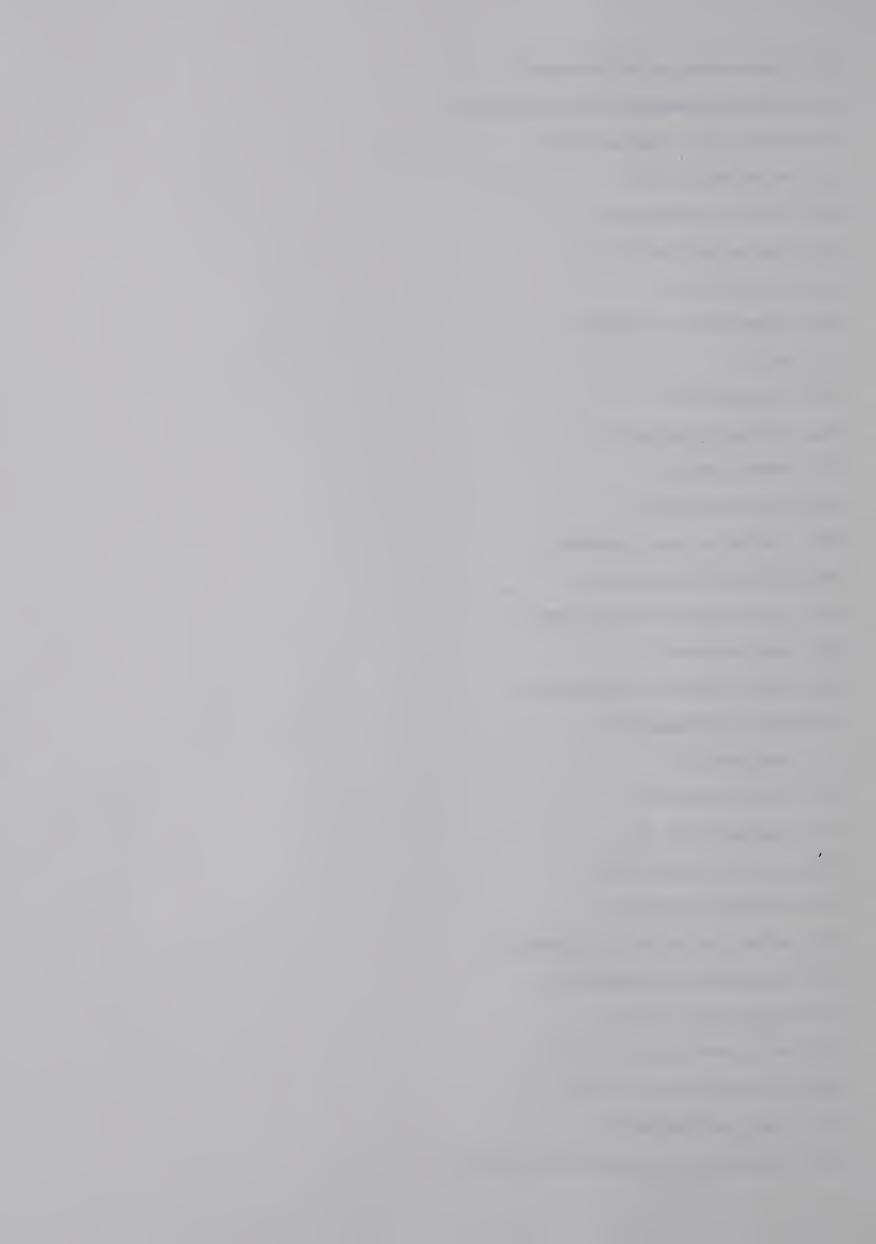88. children didn't know this (6)

89. children don't do this (1)

90. children like recognition and praise (1)

91. they like it (17)

92. they don't like it (1)

93. children don't think of alternatives (2)

94. child(ren) suggested it (9)

95. children will react better, try harder (9)

96. they are capable of doing more (1)

97. activity improved (1)

98. all doing it the same way (16)

99. a new response (1)

100. wanted them to tell me what they were doing (4)

101. children would have to shift focus (1)

102. they had too much information to process (5)

103. activity too difficult (1)

104. children's size (3)

105. size of class (2)

106. children's age or grade (5)

107. children are naturally curious (1)

108. children work better by themselves (2)

109. children's mood or attitude (9)

110. children's level and experience (18)

111. children's first time (6)

112. find out their level and experience (20)

113. children don't realize what they are doing (2)

114. children need to realize what they can do (1)

115. gives them a chance to think (17)

116. don't know their body parts (1)

117. instruction time is important (1)

118. children needed it (11)

119. children need to experience things (3)

120. children should be active participants (1)

121. children will realize there are alternatives (3)

122. children should know this (8)

123. children should be able to make their own decisions (10)

124. children need to use their imaginations (1)

125. children's physical capabilities (1)

126. children's abilities (2)

127. children will act well if it is an activity they like (1)

128. gives children leadership experience (1)

129. children need to take responsibility (2)

130. children needed direction (3)

131. children should know my expectations (7)

132. children not advanced enough (2)

133. they need to concentrate (2)

134. children need to internalize theme (2)

135. children shouldn't stand in line and wait (1)

136. all should be active (2)

137. children don't like to wait (1)

138. previous experiences of class (6)

139. children's response or reaction (8)

140. children can overestimate their ability (1)

141. children listen better if you use a variety of cues (1)

142. to get the children responding (3)

143. gets their attention (5)

144. activity boring (5)

145. the class was off that day (1)

146. activity too easy (1)

147. I chose to ignore it (3)

148. I chose to do it (12)

149. I felt badly about it (2)
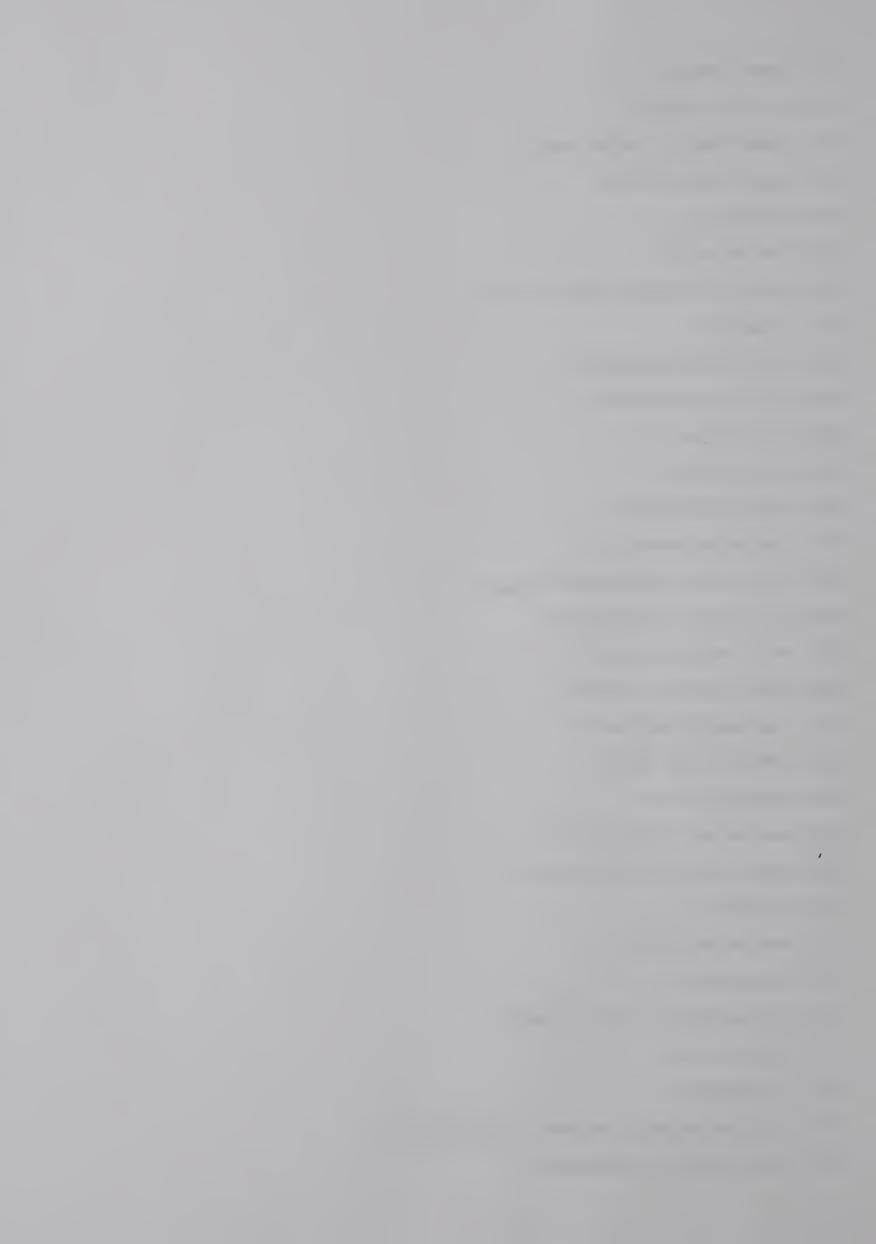
150. I was dreading it (1)

151. I don't do it well (1)

152. I was working in that direction (1)

153. my prior experience with the activity (7)

154. ideas, beliefs, philosophy (20)

155. my expectation (5)

156. I think it is important (3)

157. children need practice (1)

158. my abilities (1)

159. it came out of my head (1)

160. me (1)

161. I wanted to (2)

162. I decided not to do it (1)

163. I didn't want to (1)

164. my personality (1)

165. I wanted to rework material (1)

166. personal preference (14)

167. it is important for them to learn (1)

168. I was confused (2)

169. I didn't want to try it by myself (1)

170. that is what I asked for (1)

171. I was angry (1)

172. I was interested (1)

173. I had had enough (2)

174. I use this activity a lot (1)

175. I am familiar with it (5)

176. I am not familiar with the children (3)

177. I wanted them to understand (1)

178. I hoped I could help (1)

179. I am uncomfortable with it (4)

180. I am comfortable with it (6)

181. I was uncomfortable (2)

182. I am more comfortable with the children (1)

183. My mind was on other things (1)

184. I was responding to the children (10)

185. I was going with the flow (1)

186. You can be too specific (1)

187. I lost control (1)

188. I didn't want them overexcited (1)

189. I didn't want everything brand new (1)

190. I was upset (2)

191. I'm trying something different (4)

192. I'm nervous of that activity (1)

193. I thought it was safe (1)

194. that is what I know (1)

195. I work from what I know (3)

196. I was distracted (2)

197. my mood (8)

198. my vision (1)

199. I've been sick (2)

200. the things I enjoyed and did as a child (2)

201. I'm tired (3)

202. no reason (14)

203. I am a student teacher (1)

204. I was impatient (2)

205. I was running out of patience (2)

206. it would take too much of my energy (2)

207. I can identify with that (1)

208. seemed to be the thing to do at the time (1)

209. it is worth it (2)

210. it will make lesson successful (1)

211. It didn't matter (2)

212. it bothers me (3)

213. it is not what I'm used to (2)

214. I didn't notice (2)

215. it is not my class (1)

216. I couldn't think of another way (1)

217. I hadn't thought of it (5)

218. I missed it (1)

219. I don't know (20)

220. it was the first thing I thought of (11)

221. I forgot (8)

222. setting a good example (10)

223. that is the way I do it (4)

224. I like it, it's fun (17)

225. I do not like it (2)

226. I needed the practice (1)

227. I needed the exposure (1)

228. I didn't want to confuse the children (1)

229. that is the way I explained it (1)

230. I wasn't worried about it (1)

231. I haven't done this before (4)

232. I was going to be active (2)

233. I wanted to know why (1)

234. I didn't have to (1)

235. I was not going to be active (1)

236. I wasn't able to do it all by myself (1)

237. my clothing (1)

238. I didn't explain it well (1)

239. it is a hassle (2)

240. insecure, I'm afraid I might forget (3)

241. to make sure (4)

242. I was unsure (1)

243. I like to be included in the lesson, to participate (9)

244. I want to be part of the class (2)

245. a habit I have (2)

246. security blanket (3)

247. I had previously explained the material (2)

248. I was talking too much (1)

249. it saves my voice (3)

250. my voice doesn't project (4)

251. so they could hear me (1)

252. sound carries better (3)

253. I wanted them to be able to hear (1)

254. its loud (3)

255. the number of children (8)

256. the number of groups (7)

257. it was unconscious (4)

258. it was spontaneous (1)

259. things weren't going my way (1)

260. it works (13)

261. it didn't work (2)

262. it doesn't work (2)

263. it wasn't working (3)

264. I thought it would work better (5)

265. it wouldn't work (4)

266. nothing works out (1)

267. it was the best way (3)

268. it is logical (14)

269. I wanted to finish the activity (1)

270. movement supervisor suggested it (19)

271. movement education courses (9)

272. early childhood courses (2)

273. movement education theory (1)

274. children's movement education program (work) (4)

275. saw another teacher do it (2)

276. university/teacher training (10)

277. researcher (2)

278. teachers I have had (2)

279. university professors (3)

280. books (5)

281. teaching theory (1)

282. other activity experiences (2)

283. community (1)

284. curriculum (1)

285. friends (1)

286. faculty consultant (5)

287. I was being evaluated (1)

288. school procedures and policy (23)

289. class procedures and policy (47)

290. the children are used to it that way (4)

291. decided in cooperation with cooperating teacher (1)

292. cooperating teacher (17)

293. cooperating teacher recommended it (22)

294. cooperating teacher requested it (2)

295. cooperating teacher does it this way (16)

296. cooperating teacher's style (25)

297. cooperating teacher's decision (5)

298. cooperating teacher's expectations (11)

299. other teacher watching (1)

300. previous experience with this class (2)

301. I've tried other things (1)

302. experience with other class/activity (11)

303. other experiences throughout day (9)

304. result of last lesson (14)

305. activity in last class (6)

306. material already covered (4)

307. activity in the last lesson (4)

308. continue in gym what working on in class (22)

309. take their behavior and shape it (1)

310. their behavior was acceptable (3)

311. they had done enough of that activity (2)

312. want a certain activity (32)

313. I did not want them doing a certain activity (11)

314. I wanted them to know (1)

315. worried about cooperating teacher's reaction (1)

316. cooperating teacher viewed lesson plans (2)

317. cooperating teacher suggested it (3)

318. the activity (2)

319. I expected a certain response (2)

320. so I can see them (5)

321. they could see me (3)

322. I was the model (3)

323. I wanted to show them (5)

324. get an overview (1)

325. show what I wanted (2)

326. could see everybody (3)

327. wanted them to see it (8)

328. a picture is worth a thousand words (2)

329. children would copy me (1)

330. if you show them they remember (1)

331. wanted to see what they could do (2)

332. to see if they were on task (2)

333. to watch other children (9)

334. wanted to see what they were doing (10)

335. watch students to check for response (1)

336. amount of equipment (1)

337. take out or put away equipment (2)

338. adapt to equipment (4)

339. respect for equipment (5)

340. insufficient equipment (3)

341. equipment not being used (1)

342. easy to manipulate (3)

343. sufficient equipment (1)

344. lots of room (1)

345. they run towards the equipment (1)

346. may knock over the equipment (1)

347. other group sets up equipment (3)

348. time required to set up equipment (3)

349. introductory activity (1)

350. equipment broken (1)

351. didn't want to move equipment (1)

352. equipment was already there (3)

353. equipment was set up that way (2)

354. space/equipment might as well be used (1)

355. they should learn how to take out, care for equipment (5)

356. equipment not available (3)

357. equipment problems (2)

358. equipment/material available (10)

359. so they would have room to move (2)

360. so they can move more freely (1)

361. temperature (4)

362. size of gym (12)

363. the environment (2)

364. wanted to give them the experience (2)

365. wanted them to experiment, explore (16)

366. for variety (31)
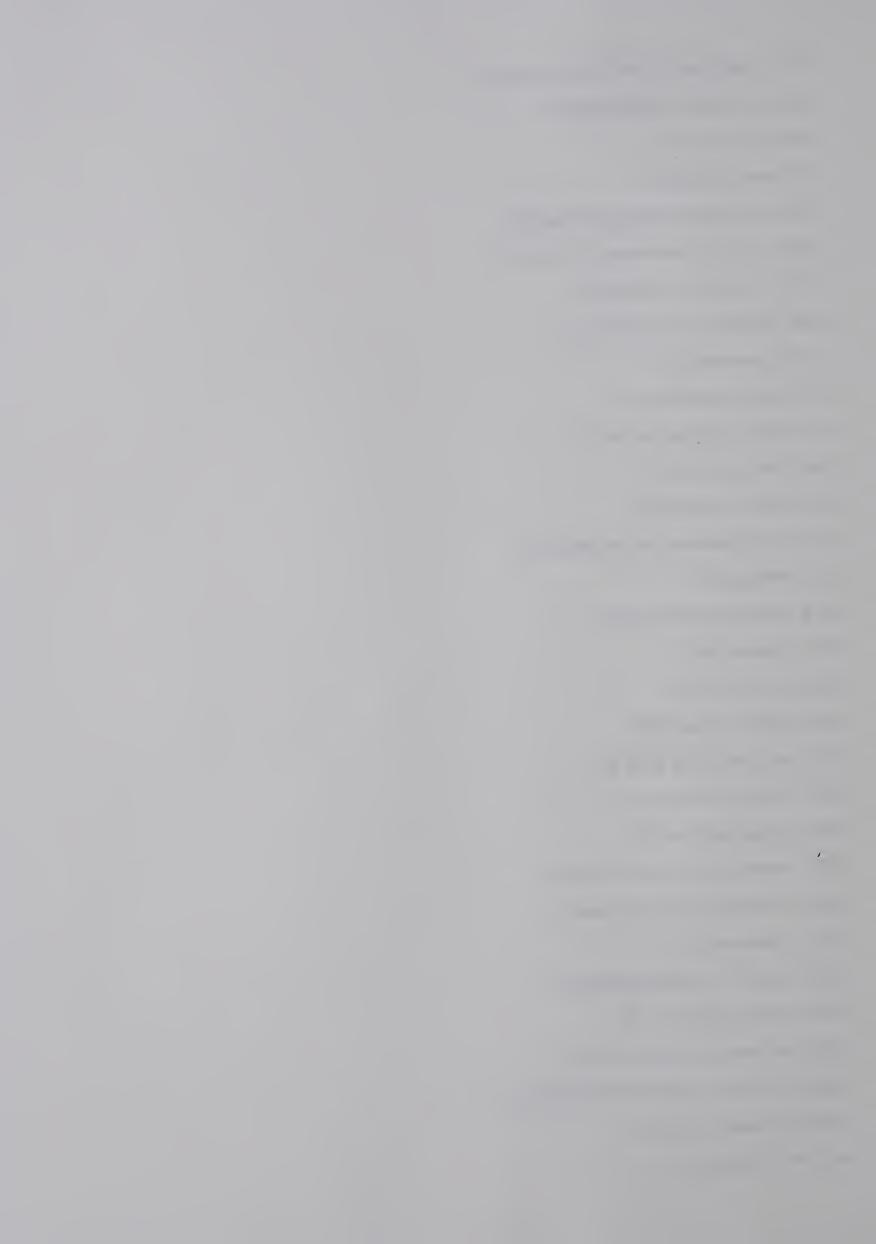
367. for conformity (1)

368. something different (5)

369. make it interesting (1)

370. keeping it simple (5)

371. point out key points (2)

372. give examples (5)

373. wanted to be really specific (1)

374. try different things (20)

375. point out variations (14)

376. give them ideas (23)

377. give me ideas (1)

378. give them directions (3)

379. needed a structured activity (3)

380. sequence/progression of material (44)

381. wanted an unstructured environment (1)

382. leads into next activity (1)

383. varies presentation (2)

384. fits in with activity (19)

385. needed one more activity (1)

386. a novelty (1)

387. develops skills (10)

388. gets the point across (3)

389. introduces new concepts (12)

390. a movement concept (8)

391. focus of lesson shifted (2)

392. following my plan (2)

393. material previously covered (1)

394. an activity we're working on (1)

395. pinpoint alternatives (1)

396. important aspect of activity (8)

397. important basic activity (6)

398. theme for the day (15)

399. objective of lesson (36)
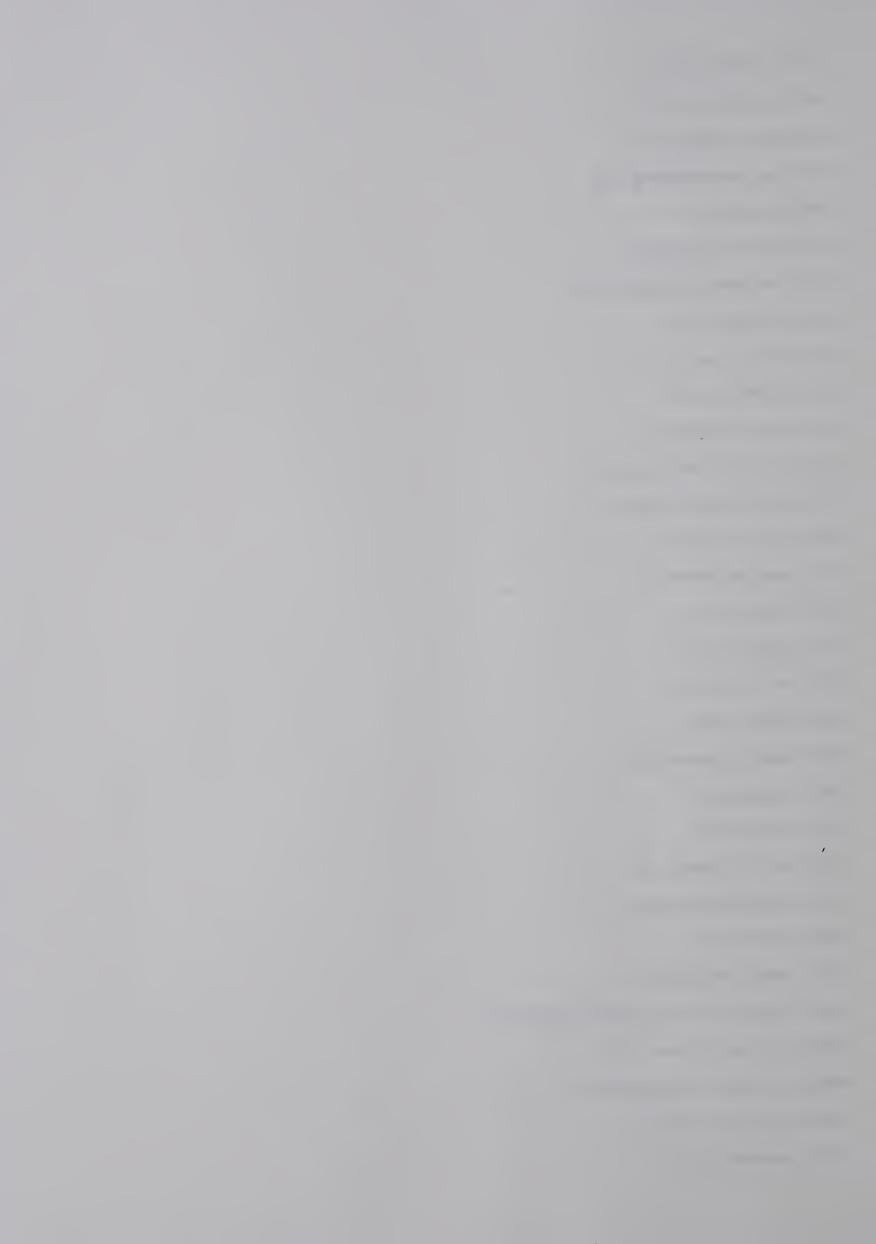
400. reinforce theme (6)

401. theme could be expanded, built on (3)

402. not theme for the day (2)

403. activity needed later in lesson or unit (17)

404. control or classroom management (43)

405. cues (6)

406. time (10)

407. insufficient time (27)

408. efficient use of time (11)

409. get on with it (1)

410. needed more time (2)

411. we were late (1)

412. enough time had been spent on it (3)

413. the lesson plan (2)

414. time for planning (1)

415. time of day of lesson (1)

416. saves time (3)

417. it took longer than I thought it would (1)

418. it is their time (3)

419. limited time with this class (1)

420. takes away from gym time (2)

421. wastes time (11)

422. running out of time (2)

423. would take too much time (2)

424. wanted it done quickly (2)

425. time to cool down (1)

426. cooperative (4)

427. discipline (5)

428. a challenge (10)
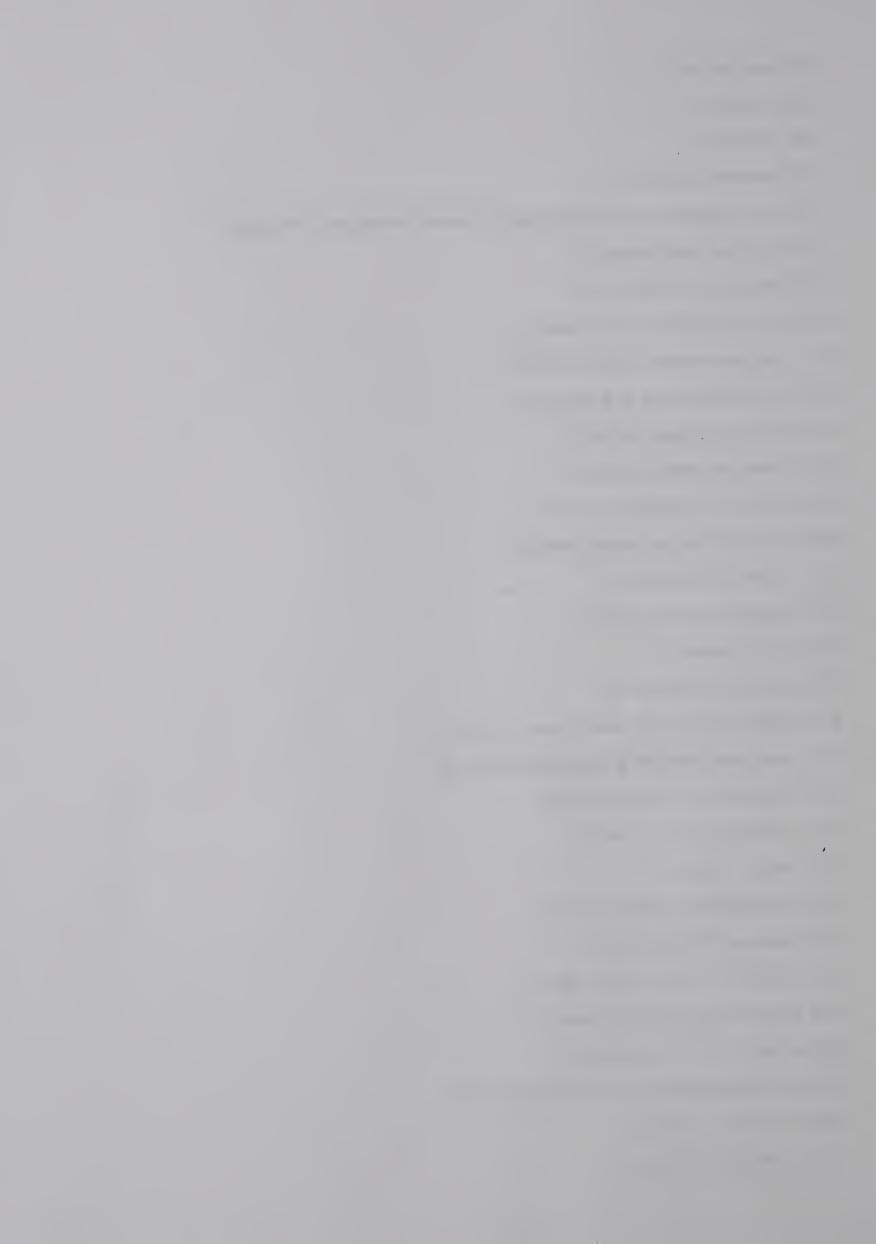
429. safety (47)

430. basis to start, a lead in (28)

431. would interupt the flow of lesson (1)

432. gives them a reference (3)

433. quiet activity (1)

434. introduction (3)

435. could get started right away (2)

436. to get a commitment from them (1)

437. to get them involved (4)

438. captures their attention (8)

439. observation (1)

440. sets atmosphere (4)

441. keeps children on task (3)

442. individual help (1)

443. reinforcement (25)

444. giving recognition and praise (6)

445. helping (3)

446. reminding children (16)

447. review (14)

448. recall skills (3)

449. makes it easier (30)

450. get children to think (4)

451. it was interesting (4)

452. enjoyment/fun (15)

453. wanted to use visual cues (4)

454. wanted to use audio cues (2)

455. a gimmick (2)

456. check for understanding (20)

457. make sure on task (3)

458. get them to a certain area (3)

459. get used to environment/stimulus (2)
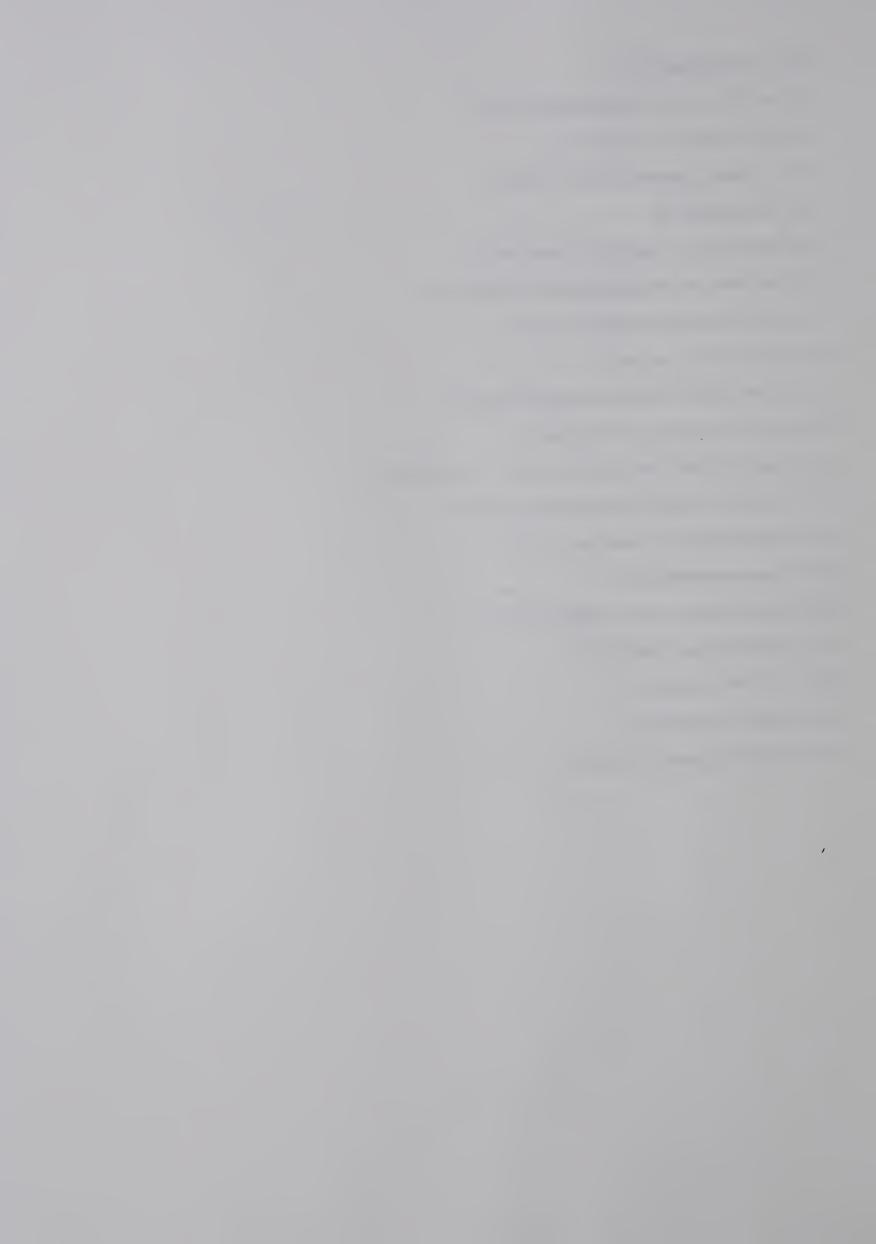
460. get used to activity (1)

461. it is a break (1)

462. awareness (25)

463. clarification (17)

464. less confusing (3)

465. for understanding (12)

466. warmup (11)

467. make it exciting (1)

468. too many distractions (1)

469. warmdown (1)

470. calming activity (12)

471. summarizing (1)

472. have to adapt (2)

473. to divide into groups (2)

474. establishing a routine (7)

475. convenience (16)

476. encouragement (4)

477. motivation (7)

478. explanation (3)

479. preventative (15)

480. guidance (4)

481. coaching points (2)

482. feedback (8)

483. practice (9)

484. burn off energy (8)

485. it would help them (1)

486. exercise (2)

487. change of pace (3)

488. freedom of choice, give a choice (11)

489. give them a focus (13)

490. give them an objective (4)

491. expand the activity (1)

492. consistency (2)

493. exaggerate (1)

494. compare (1)

495. contrast (1)

496. redefine action (3)

497. to be creative, some independence without directions from me (3)

498. use their imagination (5)

499. frequency of activity (1)

500. to remove from fun, to isolate (2)

501. discipline would work with him (1)

502. for togetherness as a group (2)

503. bring them back on task (1)

504. separate certain children (1)

505. familiar with who is in room (2)

506. important to use correct terms (2)

507. I knew their names (1)

508. repitition is important (1)

509. no elimination (1)

510. gets them together (1)

511. must be options to return them to class (2)

512. take away from other children's activity (2)

513. they won't do it otherwise (3)

514. popular children's artist (1)

515. stage is higher (1)

516. good cardiovascular activity (1)

517. because of the stimulus (1)

518. I didn't look at my lesson plan (1)

519. music was recorded on tape (1)

520. activity fit with the music (1)

521. if they are close to me they cooperate (1)

522. music too complex (1)

523. I wanted to finish it (1)

524. it was the last day (1)

525. activity was potentially dangerous (2)

526. that is how it worked out (1)

527. wanted to see what was wrong (2)

528. the weather (3)

529. gives them a feeling of community (1)

530. he does not have the proper footwear (1)

531. child does not participate well (1)

532. get the child active (1)

533. I knew which children were involved (1)

534. I suit the activity to the class (1)

535. need a physical separation so they won't fight (1)

536. I hoped I could influence the student (1)

537. sound carries to classrooms (1)

538. it was manageable (1)

539. spring/easter break is approaching (1)

540. individualized program (2)

541. the kind of class (1)

542. legal responsibility (1)

543. wanted physical activity (1)

APPENDIX J

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INITIAL GROUPING OF UNITS

APPENDIX J

INITIAL GROUPING OF UNITS

1. it was manageable

2. cooperative activity

   a. gives them a feeling of community

   b. gets them together

   c. for togetherness as a group

3. reinforcement

   a. reinforce theme

   b. giving recognition and praise

4. feedback

   a. compare and contrast

   b. exaggerate

   c. feedback

   d. coaching points

   e. point out key points

   f. guidance

5. convenience/makes it easier

6. cues

   a. wanted to use visual cues

   b. wanted them to see it

   c. if you show them they remember

   d. a picture is worth a thousand words

   e. wanted to use audio cues

   f. so they could hear me

   g. I wanted tham to be able to hear

   h. children listen better if you use a variety of cues

7. organization

   a. establishing a routine

   b. divide into groups

   c. get them to a certain area

8. novelty

    a.   a challenge

    b.   varies presentation

    c.   novelty activity

    d.   something different

    e.   it was interesting

    f.   a gimmick

    g.   change of pace

9.   explanation

    a.   clarification

    b.   for understanding

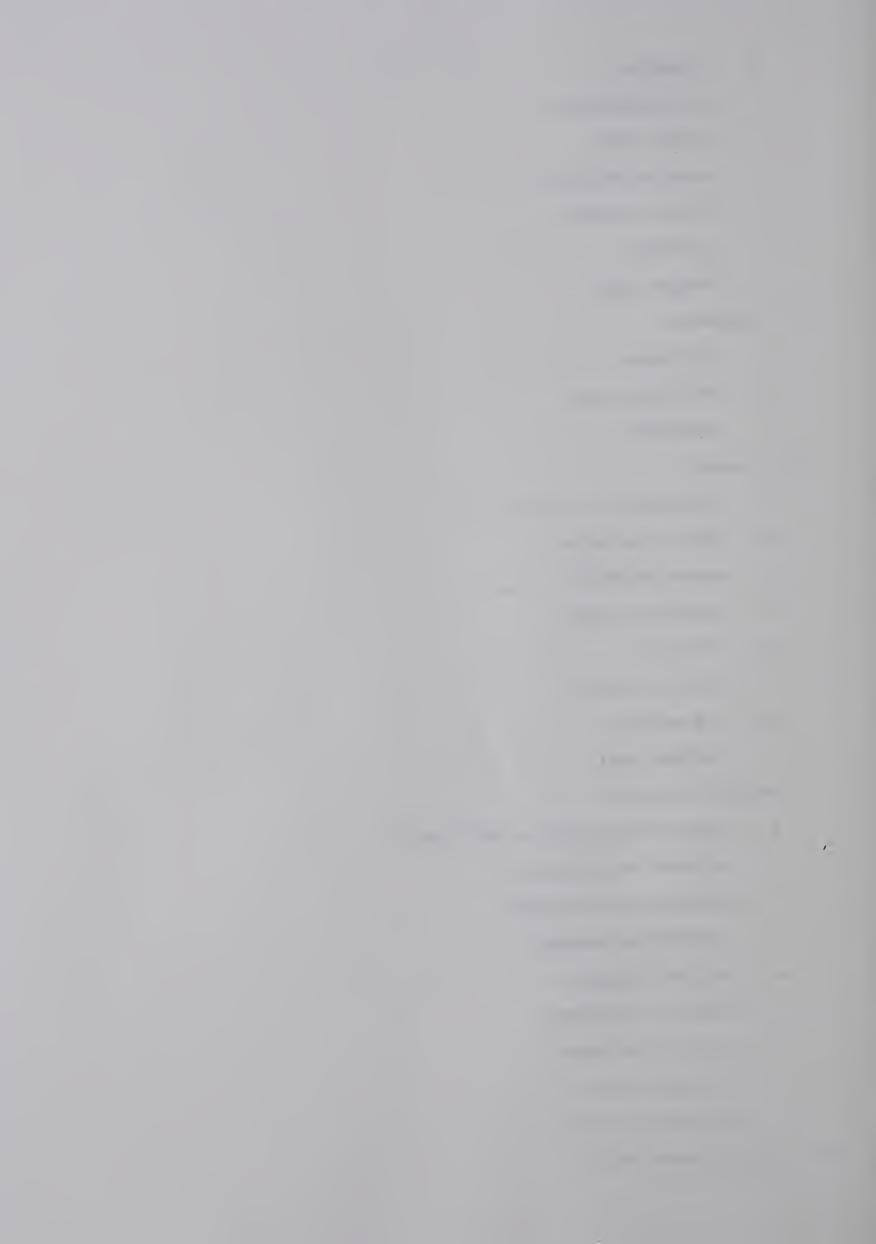   c.   explanation

10.   extending

    a.   take behavior and shape it

    b.   pinpoint alternatives

    c.   expand the activity

    d.   try different things

    e.   for variety

    f.   point out variations

    g.   give examples

    h.   give them ideas

11.   equipment availability

    a.   space/equipment might as well be used

    b.   equipment not being used

    c.   equipment/material available

    d.   equipment not available

    e.   sufficient equipment

    f.   insufficient equipment

    g.   amount of equipment

    h.   equipment broken

    i.   equipment problems
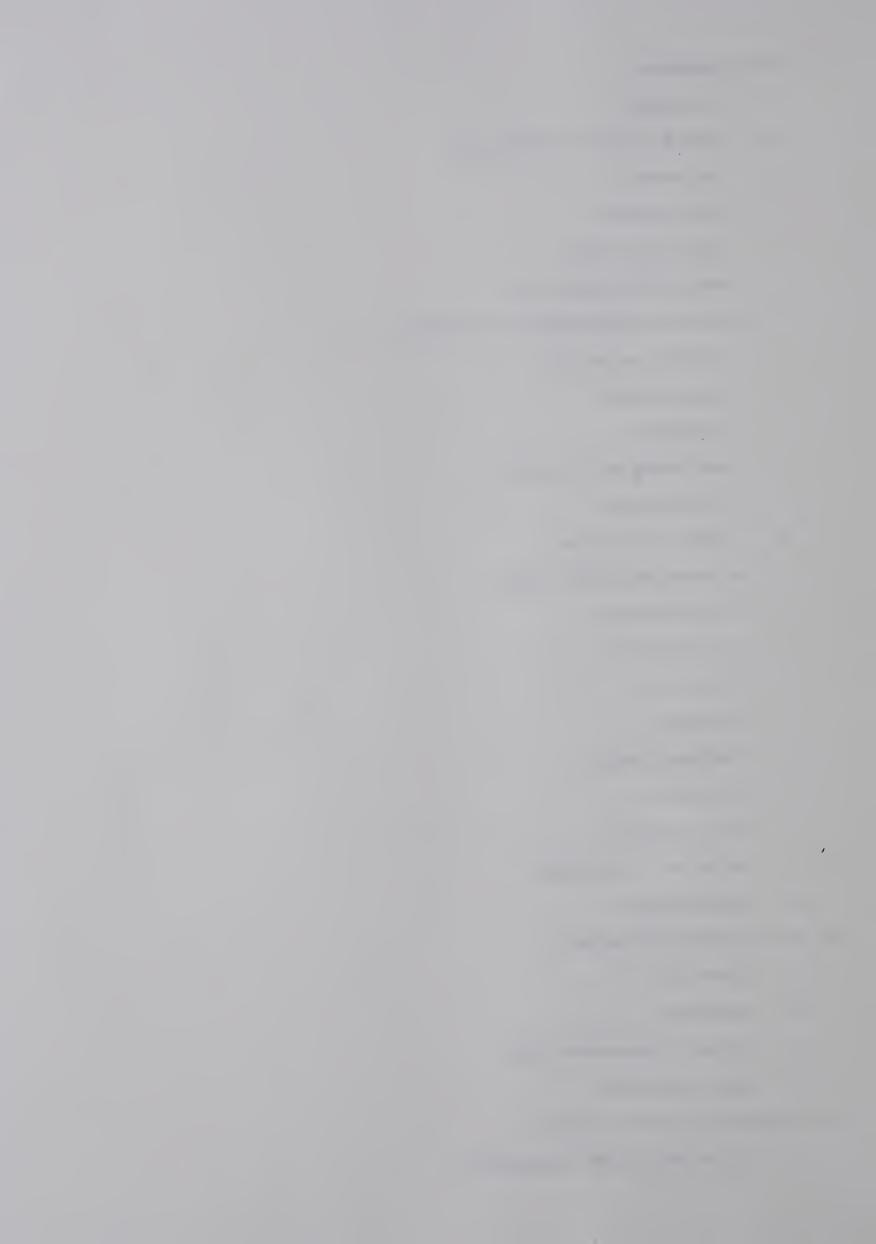
12.   focus of lesson shifted

13. emotional status

    a.   to make sure

    b.   insecure, I'm afraid I might forget

    c.   I was unsure

    d.   security blanket

    e.   I was uncomfortable

    f.   I am uncomfortable with it

    g.   I am more comfortable with the children

    h.   I am comfortable with it

    i.   I was confused

    j.   I was angry

    k.   I was running out of patience

    l.   I had had enough

    m.   I wasn't worried about it

    n.   my mind was on other things·

    o.   I was distracted

    p.   I was interested

    q.   it bothers me

    r.   my mood

    s.   I felt badly about it

    t.   I was upset

    u.   I was dreading it

    v.   I'm nervous of that activity

    w.   I was impatient

14. extra-classroom influences

    a.   community

    b.   curriculum

    c.   school procedures and policy

    d.   legal responsibility

15. cooperating teacher's position

    a.   cooperating teacher's expectations

     b.   cooperating teacher viewed lesson plans

     c.   worried about cooperating teacher's reaction
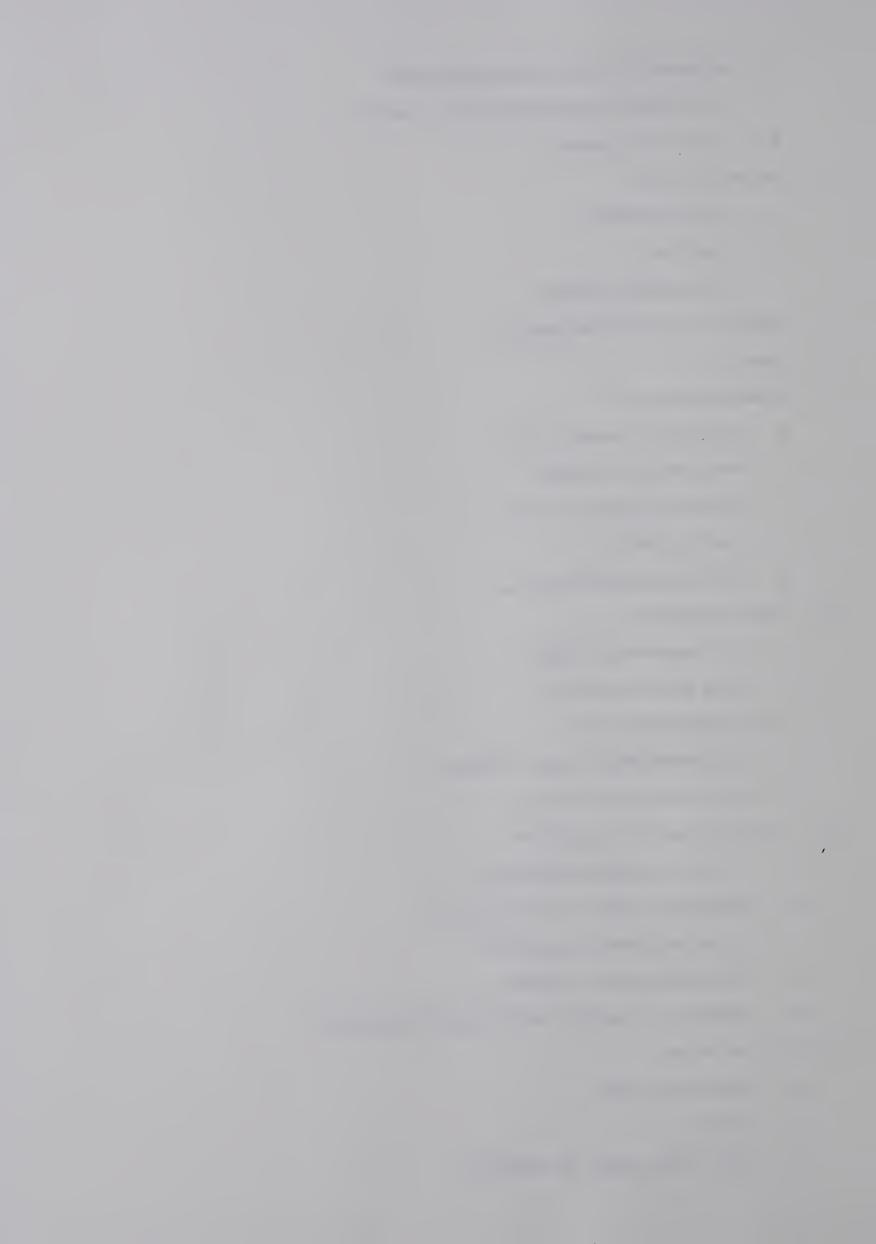
     d.   I was being evaluated

16. people observing

     a.   faculty consultant

     b.   researcher

     c.   other teacher watching

17. movement supervisor suggested it

18. books

19. university education

     a.   movement education courses

     b.   early childhood courses

     c.   movement education theory

     d.   teaching theory

     e.   university/teacher training

20. other experiences

     a.   work experiences (CMEP)

     b.   other activity experiences

21. cooperating teacher's style

     a.   cooperating teacher does it this way

     b.   cooperating teacher's style

22. cooperating teacher's suggestion

     a.   cooperating teacher suggested it

     b.   cooperating teacher recommended it

     c.   cooperating techer requested it

     d.   cooperating teacher's decision

     e.   decided in cooperating with the cooperating teacher

23. other role models

     a.   cooperating teacher

     b.   friends

     c.   saw another teacher do it that way

    d.   university professors

    e.   teacher I have had

24. classroom routine

    a.   consistency

    b.   does not have proper footwear

    c.   class procedure and policy

    d.   the children are used to it that way

25. children's physical capabilities

    a.   one group of children better than others

    b.   they could do more

    c.   children's physical capabilities

    d.   children's size

    e.   they can do it

    f.   they can't do it well

    g.   they are capable of doing more

26. children's level and experience

    a.   children's level and experience

    b.   children's abilities

    c.   children not advanced enough

    d.   don't know their body parts

    e.   they haven't had enough experience

27. affective goals

    a.   children will feel more comfortable

    b.   they will have a good self-concept

    c.   they will feel success

    d.   they will feel secure

28. children's work habits

    a.   children work better by themselves

    b.   work better with members of their own sex

    c.   work better alone

    d.   they do not work well in groups

29. children's previous experience

    a.   previous experiences of class

    b.   no experience with this activity

    c.   they are not familiar with the activity

    d.   children didn't know this

    e.   they are familiar with the activity

    f.   children's first time

30. focusing

    a.   give them a focus

    b.   give them an objective

    c.   give them a point of reference

31. it's a break

32. it was unconscious

    a.   it was unconscious

    b.   I don't know

    c.   I hadn't thought of it

    d.   no reason

    e.   it was spontaneous

    f.   that is how it worked out
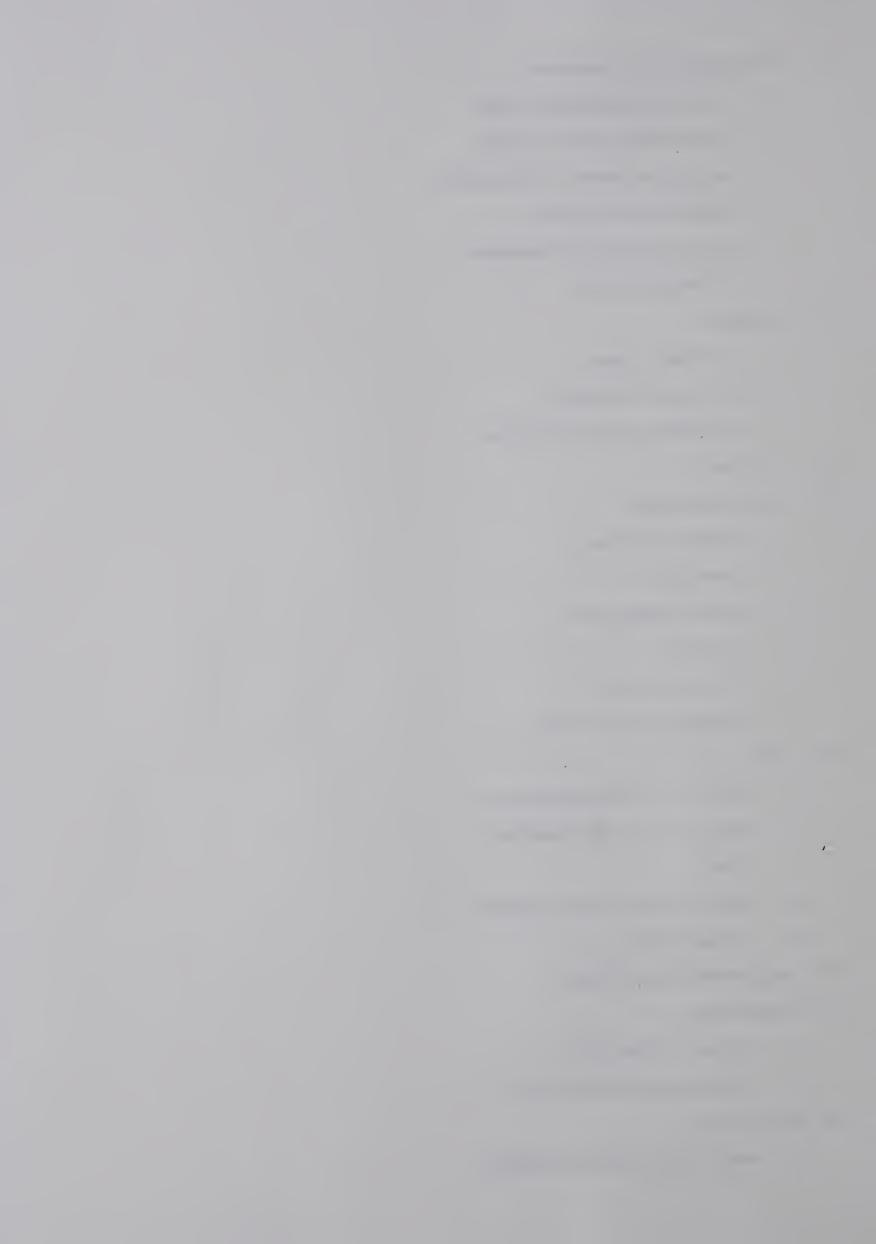
33. safety

    a.   they run towards the equipment

    b.   may knock over the equipment

    c.   safety

    d.   activity was potentially dangerous

    e.   I thought it was safe

34. things weren't going my way

35. children's era

    a.   popular children's artist

    b.   children could identify with it

36. have to adapt

    a.   adapt to the equipment available

37. the stimulus

    a.   because of the stimulus

    b.   activity fits with the music

    c.   fits in with activity

    d.   music too complex

    e.   music was recorded on tape

38. sound projection

    a.   sound carries better

    b.   it's loud

    c.   my voice doesn't project

39. surrounding issues

    a.   my clothing

    b.   it was the last day

    c.   the weather

    d.   spring/easter break was coming

    e.   time of day of lesson

    f.   temperature

40. freedom of environment

    a.   for conformity

    b.   wanted to be really specific

    c.   give them directions

    d.   wanted an unstructured environment

    e.   needed a structured activity

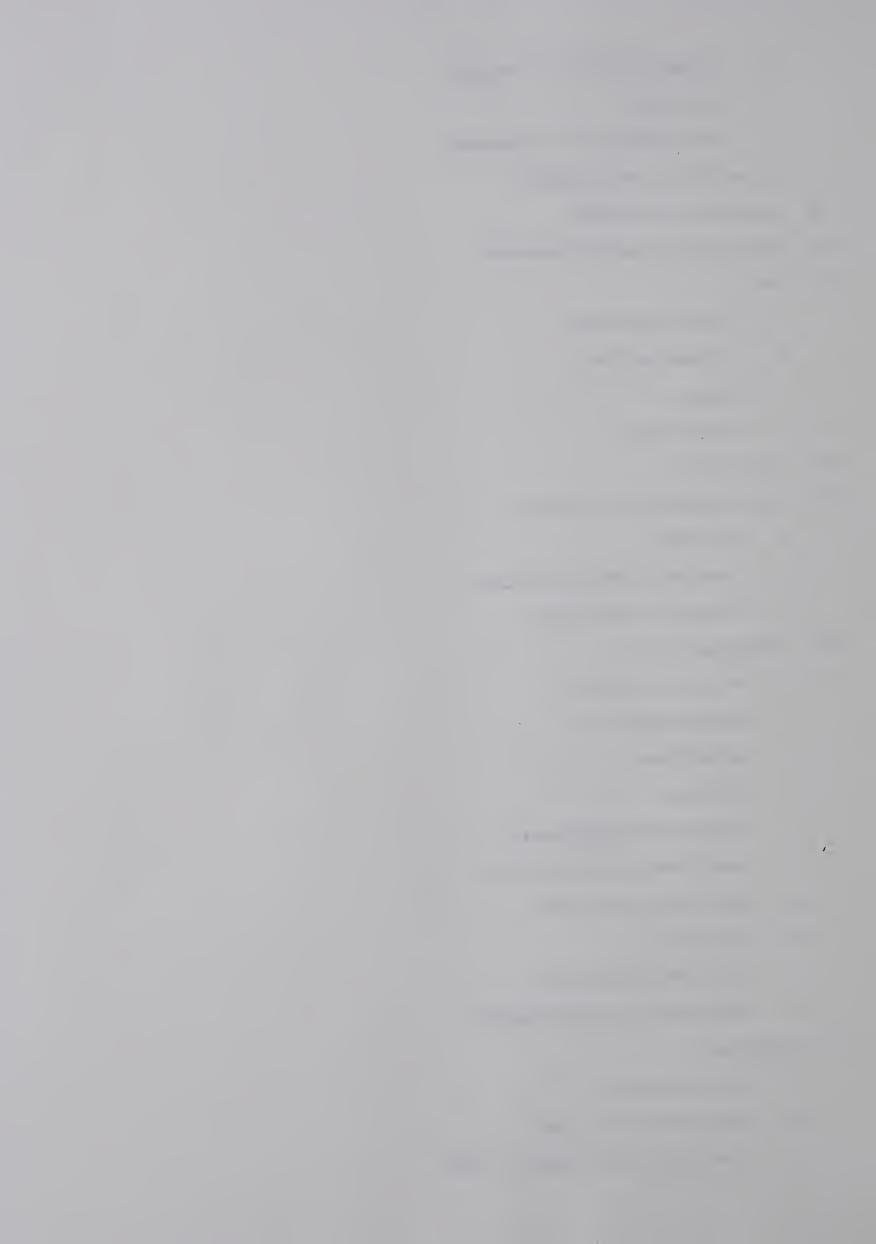41. so they would have room to move freely

42. acclimatize

    a.   get used to environment/stimulus

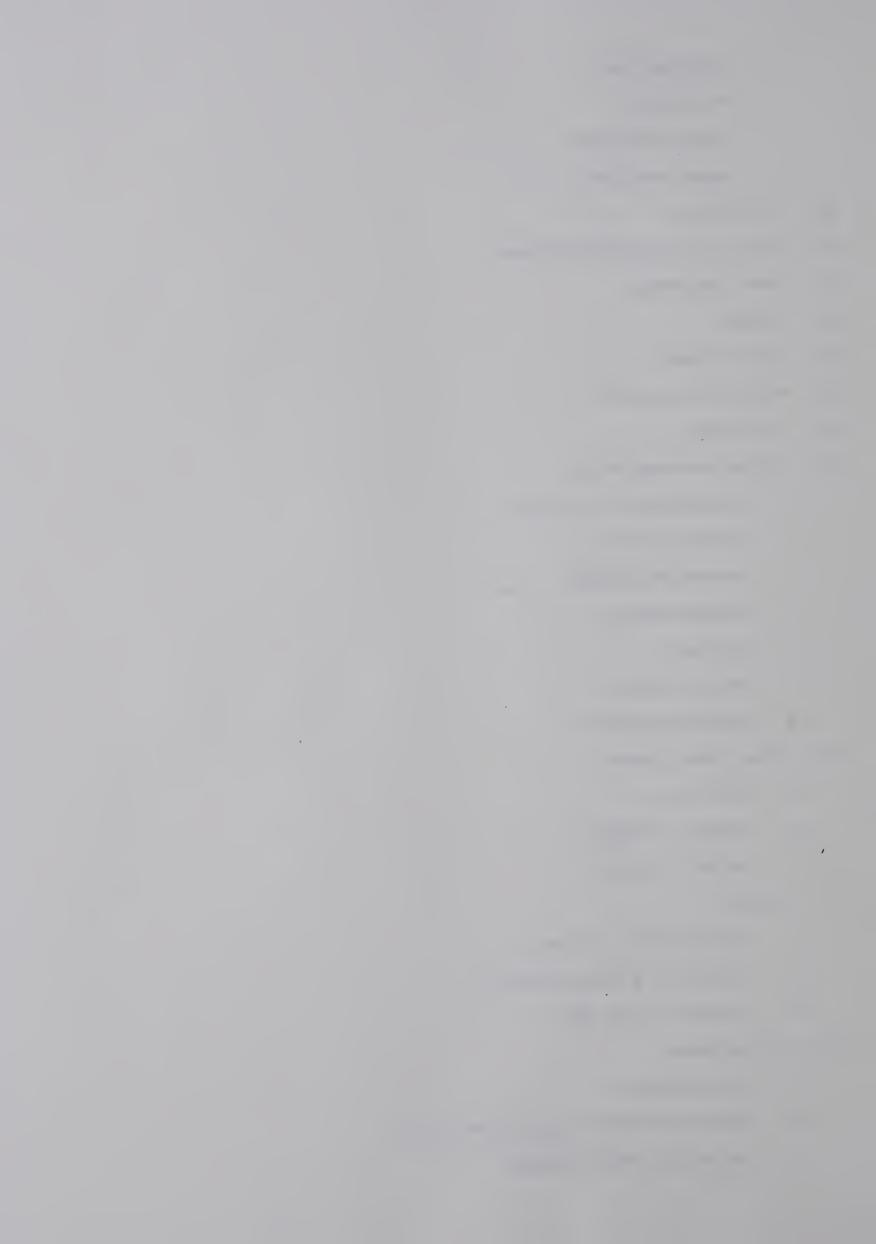   b.   get used to the activity

43. the gym environment

    a.   stage is higher
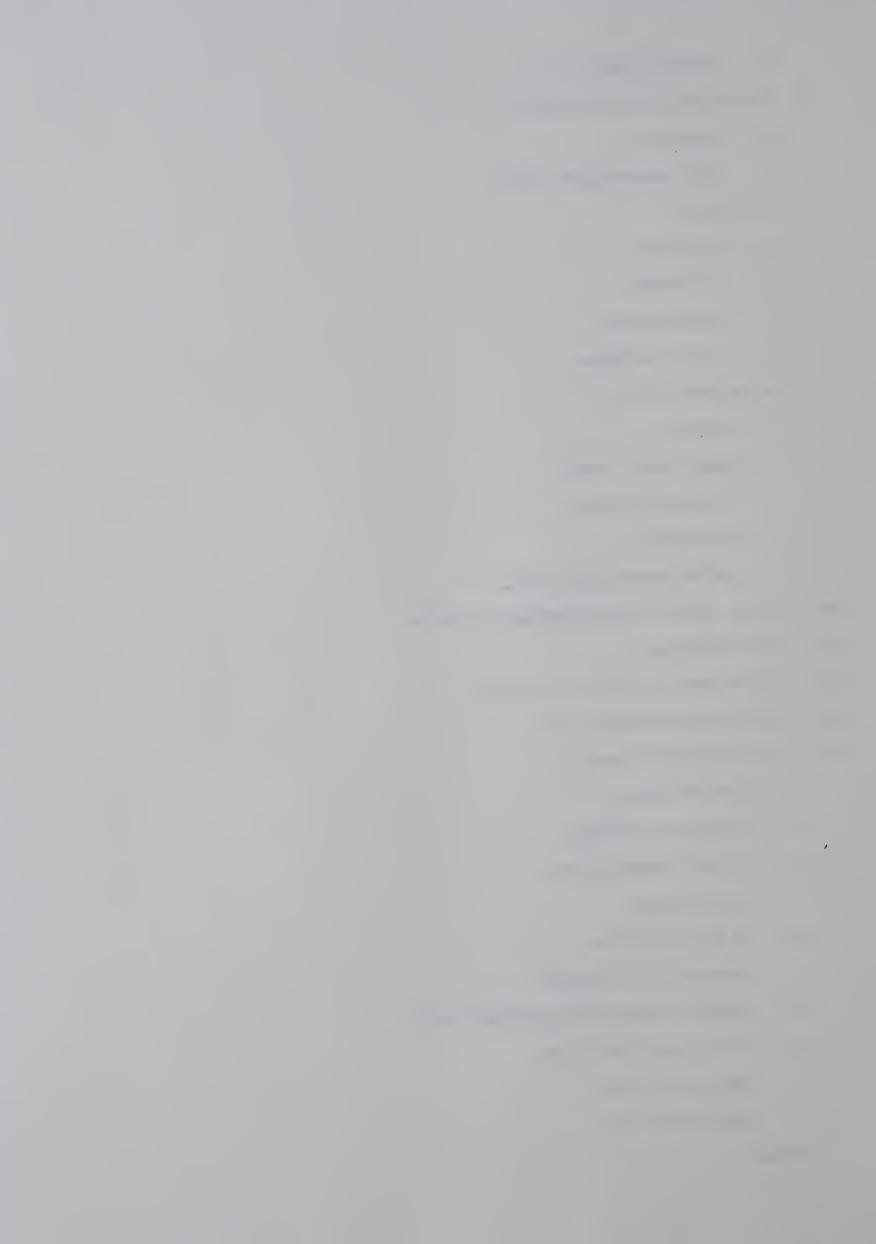
    b.   the environment

    c.   lots of room

  d. too many distractions in the gym

  e. size of gym

  f. sound carries to other classrooms

44. would interrupt flow of lesson

45. needed one more activity

46. they had had enough of that activity

47. help

  a. I hoped I could help

  b. it would help them

  c. helping

  d. individual help

48. I lost control

49. I was responding to the children

  a. the children

  b. I was responding to the children

  c. I was going with the flow

50. efficient use of time

  a. wanted it done quickly

  b. efficient use of time

  c. get on with it

  d. saves time

  e. could get started right away

  f. enough time had been spent on it

  g. takes away from gym time

  h. wastes time

  i. would take too much time

  j. time required to set up equipment

51. limited time

  a. time for planning

  b. limited time with this class
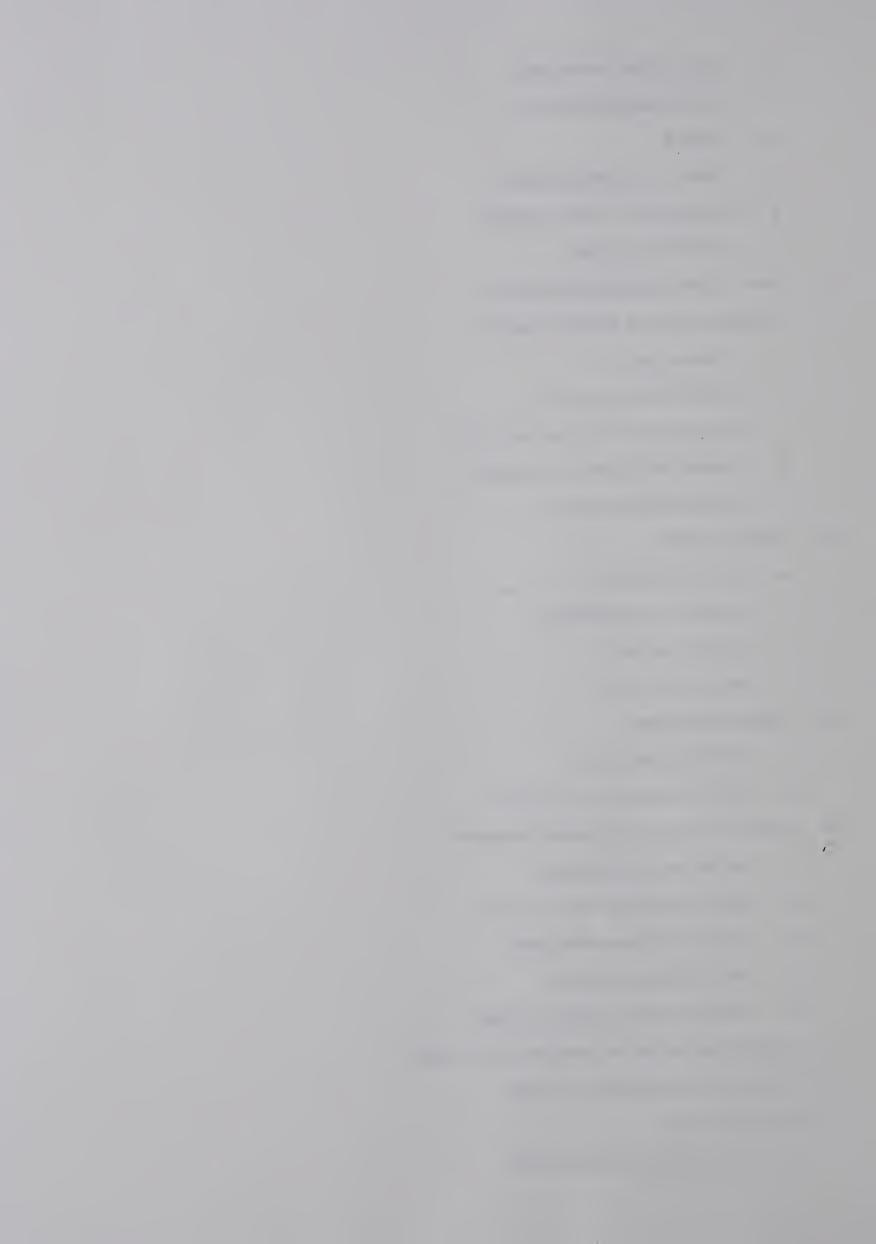
  c. it took longer than I thought it would

    d.   insufficient time

    e.   we were late

    f.   running out of time

    g.   needed more time

52. it is their time

53. I didn't want everything brand new

54. I knew their names

55. I forgot

56. gives me ideas

57. you can be too specific

58. it is a hassle

59. children't emotional status

    a.   children's mood or attitude

    b.   children distracted

    c.   children discouraged

    d.   children excited

    e.   they like it

    f.   they don't like it

    g.   children complained

60. numbers/size of group

    a.   size of class

    b.   number of children

    c.   number of groups

61. my idea

    a.   I couldn't think of another way

    b.   it was the first thing I thought of

    c.   it came out of my head

62. my expectations

    a.   my expectations

    b.   I did not want them doing a certain activity

    c.   I expected a certain response

    d.   I wanted a certain activity

63. fitness attributes of the activity

    a.   exercise

    b.   good cardiovascular activity

64. warmdown

    a.   warmdown

    b.   quiet activity

    c.   calming activity

    d.   time to cool down

65. introductory activity

    a.   warmup

    b.   basis to start, a lead in

    c.   introductory activity

    d.   introduction

    e.   get the children responding

66. children should not suffer because of some

67. activity improved

68. children can overestimate their ability

69. child does not participate well

70. amount of physical activity

    a.   burn off energy

    b.   frequency of activity

    c.   wanted physical activity

    d.   no elimination

    e.   all should be active

    f.   more children are active

    g.   children shouldn't stand in line and wait

    h.   children don't like to wait

    i.   keeps children busy
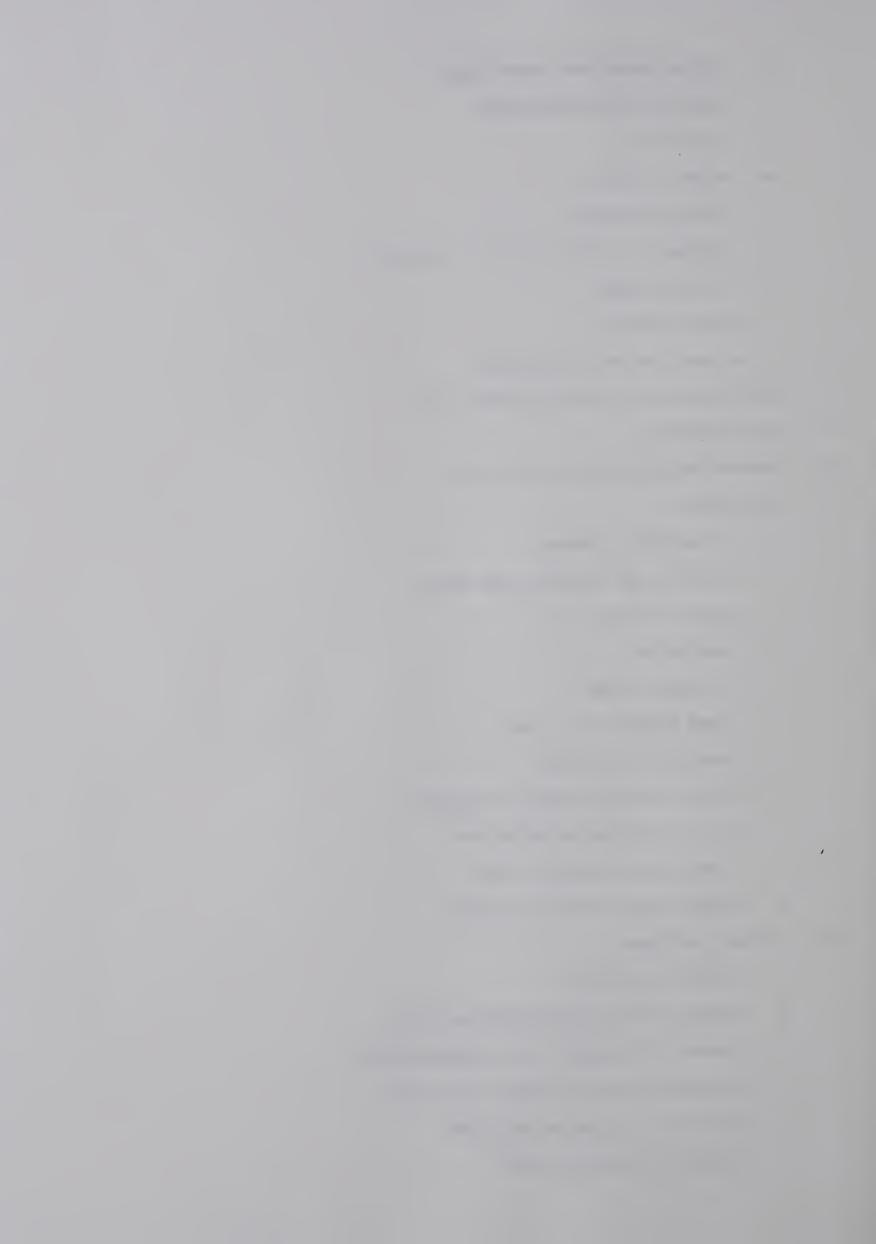
    j.   get the child active

71. behavior

a.   most of them were quiet

b.   children paying attention

c.   manners

d.   children not disrupting class

e.   their behavior was acceptable

f.   children not off task

72. gives children leadership experience

73. children's lack of a creative response

a.   children copy

b.   children would copy me

c.   they weren't coming up with ideas

d.   children don't think of alternative

e.   all doing it the same way

74. children decided

a.   child volunteered

b.   a child(ren) suggested it

c.   children decided

d.   they asked for it

75. children's response

a.   children's response

b.   children's response or reaction

76. children not giving appropriate response

a.   not the expected reponse

b.   children doing the activity wrong

c.   children not responding well

d.   their response was slow

e.   not doing what I wanted, off task

77. I wanted them to tell me what they were doing

78. children will react better, try harder

79. task complexity

a.   it would have confused them
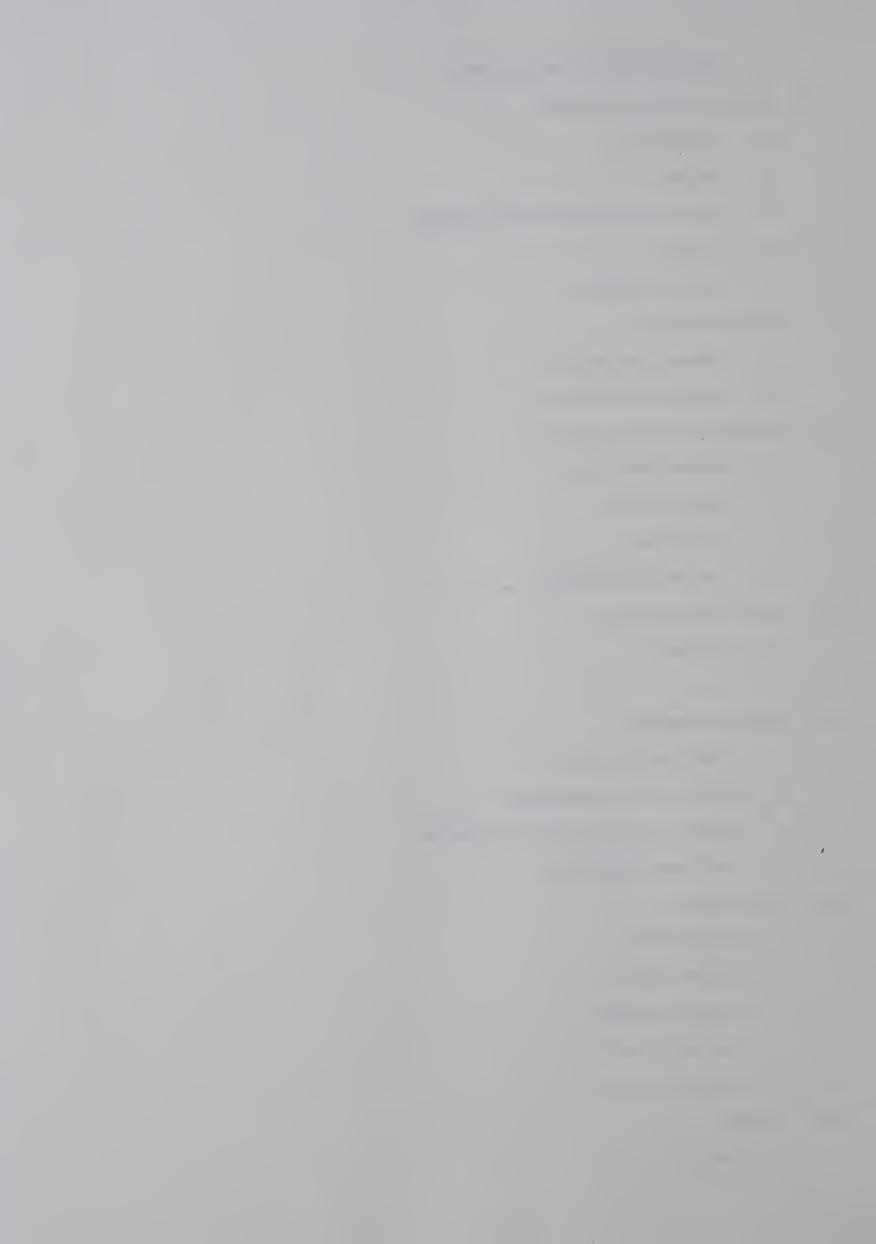
b. children would have to shift focus

c. I didn't want to confuse them

d. actvity boring

e. activity too easy

f. activity too difficult

g. they had too much information to process

h. keeping it simple

i. less confusing

80. I knew which children were involved

81. give them something they are familiar with

82. they deserved it

83. children should know my expectations

84. observation

a. to watch other children

b. wanted to see what they were doing

c. get an overview

d. observation

e. make sure on task

f. to see if they were on task

g. check for understanding

h. watch students to check for response

i. find out their level and experience

j. wanted to see what was wrong

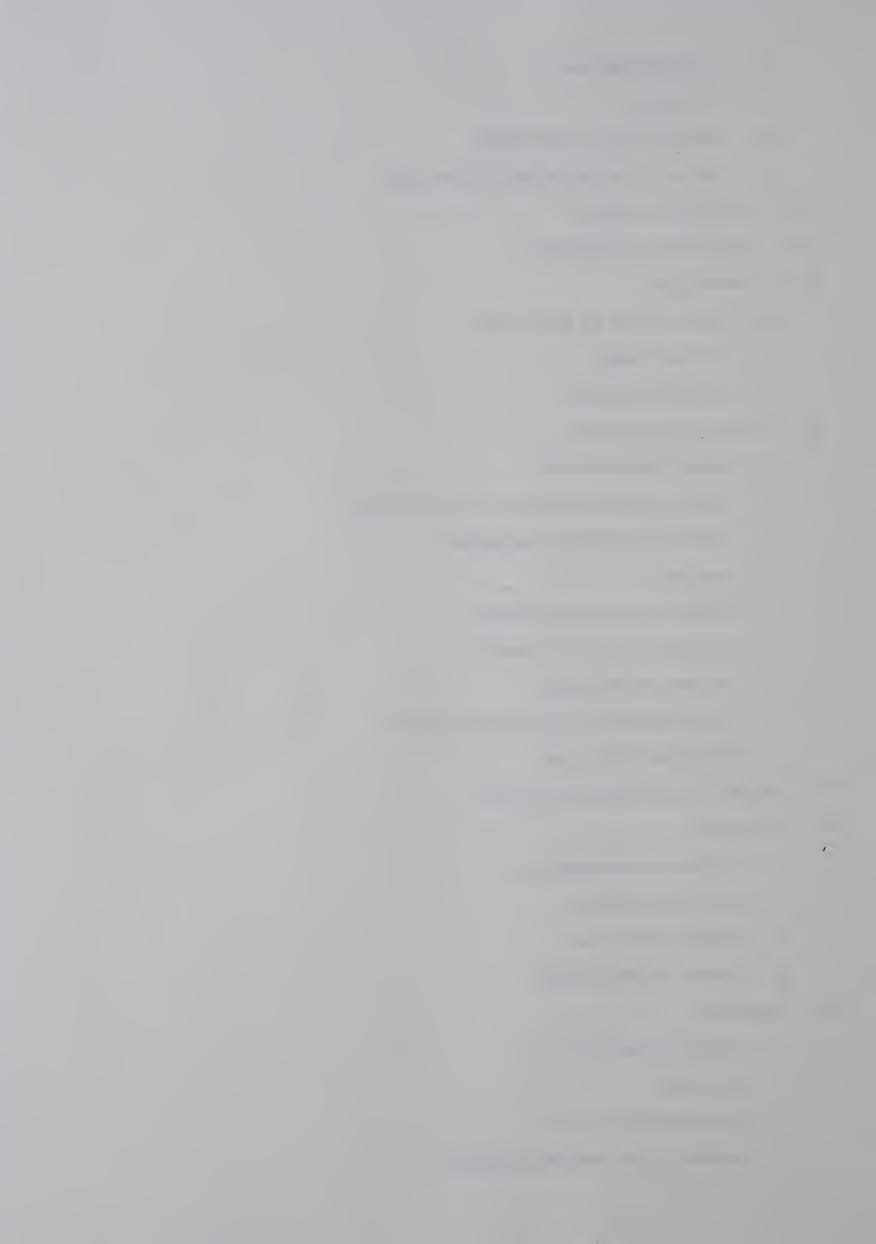k. wanted to see what they could do

85. children's attributes

a. children don't do this

b. children don't realize what they are doing

c. children will act well if it is an activity they like

d. if they are close to me they will cooperate

e. children like recognition and praise

f. children are naturally curious

g.   children tend to crowd together

86. teacher's physical condition

    a.   I've been sick

    b.   I'm tired

    c.   it would take too much of my energy

    d.   my vision

    e.   it saves my voice

87. teacher's needs

    a.   I needed the practice

    b.   I needed the exposure

88. teacher's personal preference

    a.   personal preference

    b.   I like it, its fun

    c.   I do not like it

    d.   I can identify with that

89. teacher's personality

    a.   personality

    b.   me

90. teacher's directions

    a.   I didn't explain it well

    b.   that is the way I explained it

    c.   I had previously explained the material

    d.   that is what I asked for

91. not workable

    a.   it didn't work

    b.   it doesn't work

    c.   it wasn't working

    d.   it wouldn't work

    e.   nothing works out

92. workable

    a.   it works

b. it was the best way

c. it is logical

d. I thought it would work better

e. seemed to be the thing to do at the time

93. I was talking too much

94. I wanted them to understand

95. the lesson plan

a. I didn't look at my lesson plan

b. the lesson plan

c. following my plan

96. classroom management

a. keeps children on task

b. need a physical separation so they won't fight

c. control or classroom management

d. discipline

e. discipline would work with him

f. to remove from fun, to isolate

g. separate certain children

h. must be options to return them to class

i. bring them back on task

97. I hoped I could influence the student

98. needed help

a. children not understanding

b. child needs attention

c. children needed help

d. children having problems

99. awareness

a. children should know this

b. awareness

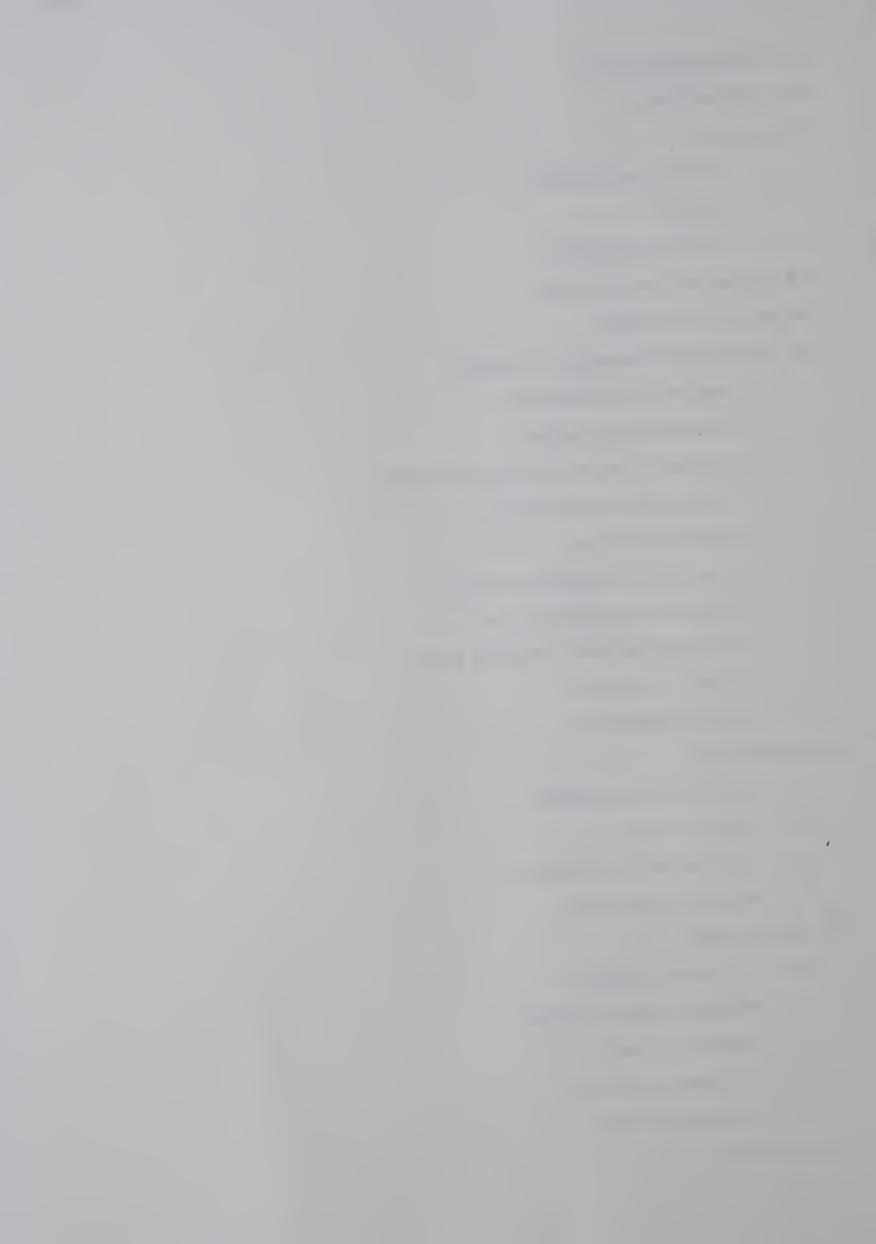c. I wanted them to know

d. wanted to give them the experience

100. individualized program

101. children's habit

102. practice

    a.   children need practice

    b.   practice

    c.   repitition is important

103. familiar with who is in room

104. gets the point across

105. sequence and progression of material

    a.   leads into the next activity

    b.   material already covered

    c.   continue in gym what working on in class

    d.   I was working in that direction

    e.   result of last lesson

    f.   theme could be expanded, built on

    g.   sequence progression of material

    h.   activity needed later in lesson or unit

    i.   activity in last class

    j.   activity in last lesson

106. significance

    a.   introduces new concepts

    b.   develops skills

    c.   important aspect of activity

    d.   important basic activity

107. lesson theme

    a.   a movement concept

    b.   an activity we're working on

    c.   theme for the day

    d.   not theme for the day

    e.   objective of lesson

108. prevention

a. it will make the lesson successful

b. preventative

c. minimizes problems

109. review

a. summarize

b. review

c. reminding children

d. redefine action

110. motivation
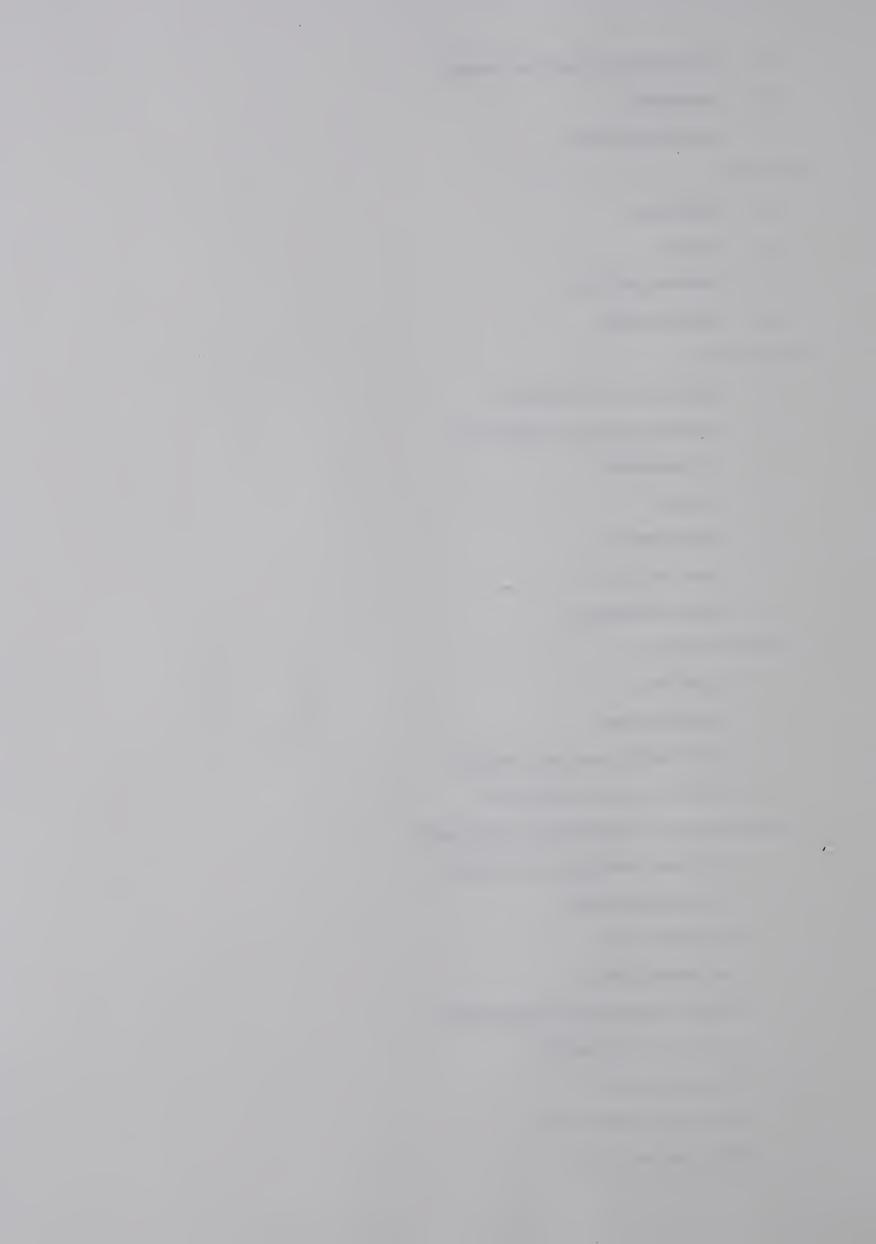
a. gets/captures their attention

b. get them involved, a commitment

c. sets atmosphere

d. motivate

e. encouragement

f. make it exciting

g. make it interesting

111. teacher's abilities

a. my abilities

b. I don't do it well

c. I wasn't able to do it all by myself

d. I didn't want to try it by myself

112. teacher's previous experiences with activity

a. experience with other class/activity

b. I've tried other things

c. it's a habit I have

d. I am familiar with it

e. my prior experience with the activity

f. it is not what I'm used to

g. that is what I know

h. I work from what I know

i. that is the way I do it

    j.   I haven't done this before

    k.   I use this activity a lot

    l.   the things I enjoyed as a child

113. teacher's previous experiences with the children

    a.   previous experience with this class

    b.   other experiences throughout day

    c.   first time with this class

    d.   I am not familiar with the children

114. teacher's inclusion

    a.   I want to be part of the class

    b.   I like to be included in the lesson, to participate

115. teacher's decision

    a.   I didn't have to

    b.   I decided not to do it

    c.   I chose to ignore it

    d.   I wanted to

    e.   I chose to do it

    f.   I didn't want to

    g.   I didn't want to move the equipment
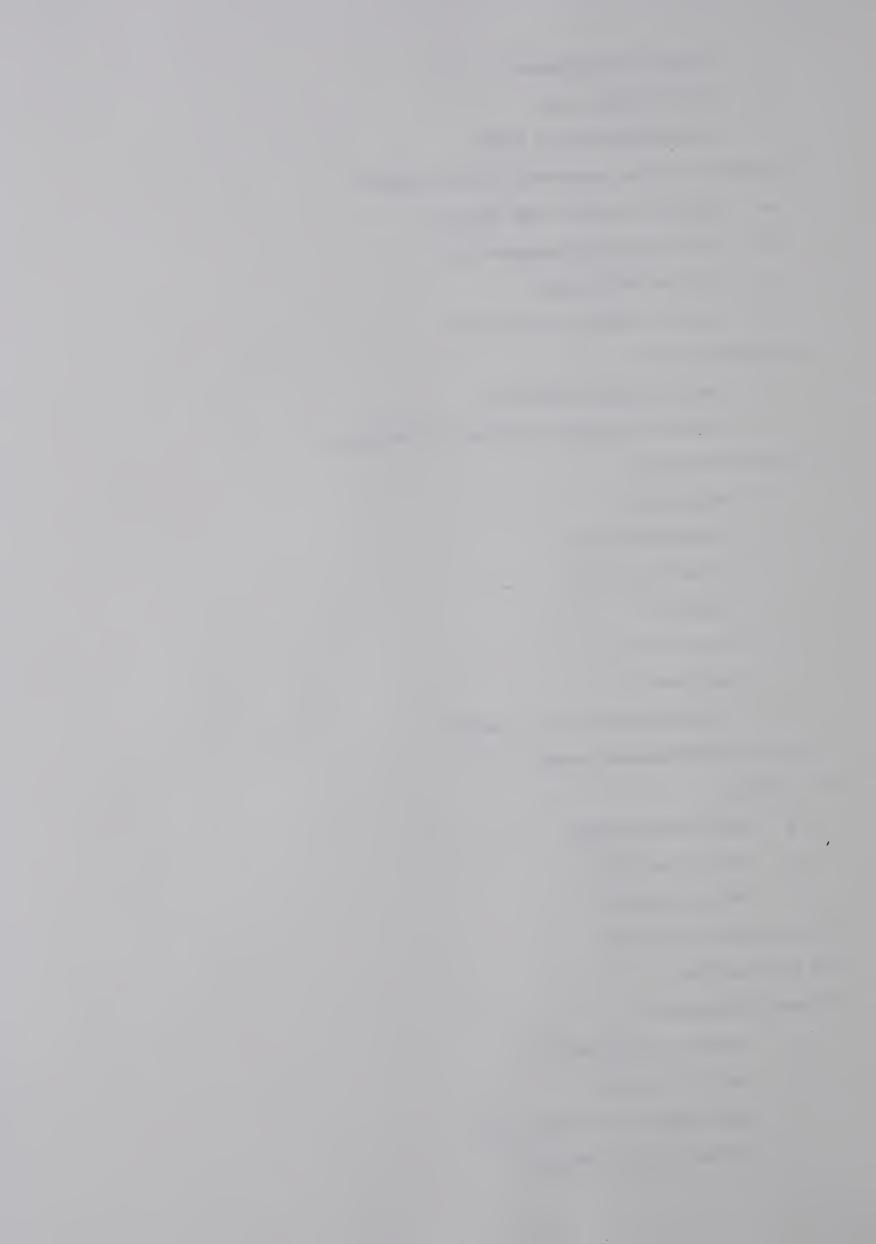
116. they could show what I wanted

117. visibility

    a.   could see everybody

    b.   so I can see them

    c.   they could see me

118. I thought they knew that

119. enjoyment/fun

120. activity completion

    a.   I wanted to finish the activity

    b.   I wanted to finish it

    c.   children know they will get a turn

    d.   they had finished something

    e.   children had finished activity

    f.   some children did not have a turn

    g.   children had not finished activity

121. important to use correct terms

122. instruction time is important

123. take away from other children's activity

124. they needed to change their behavior

125. makes it personal

126. children find it easier

127. a new response

    a.   a new response

    b.   child's response was interesting, different
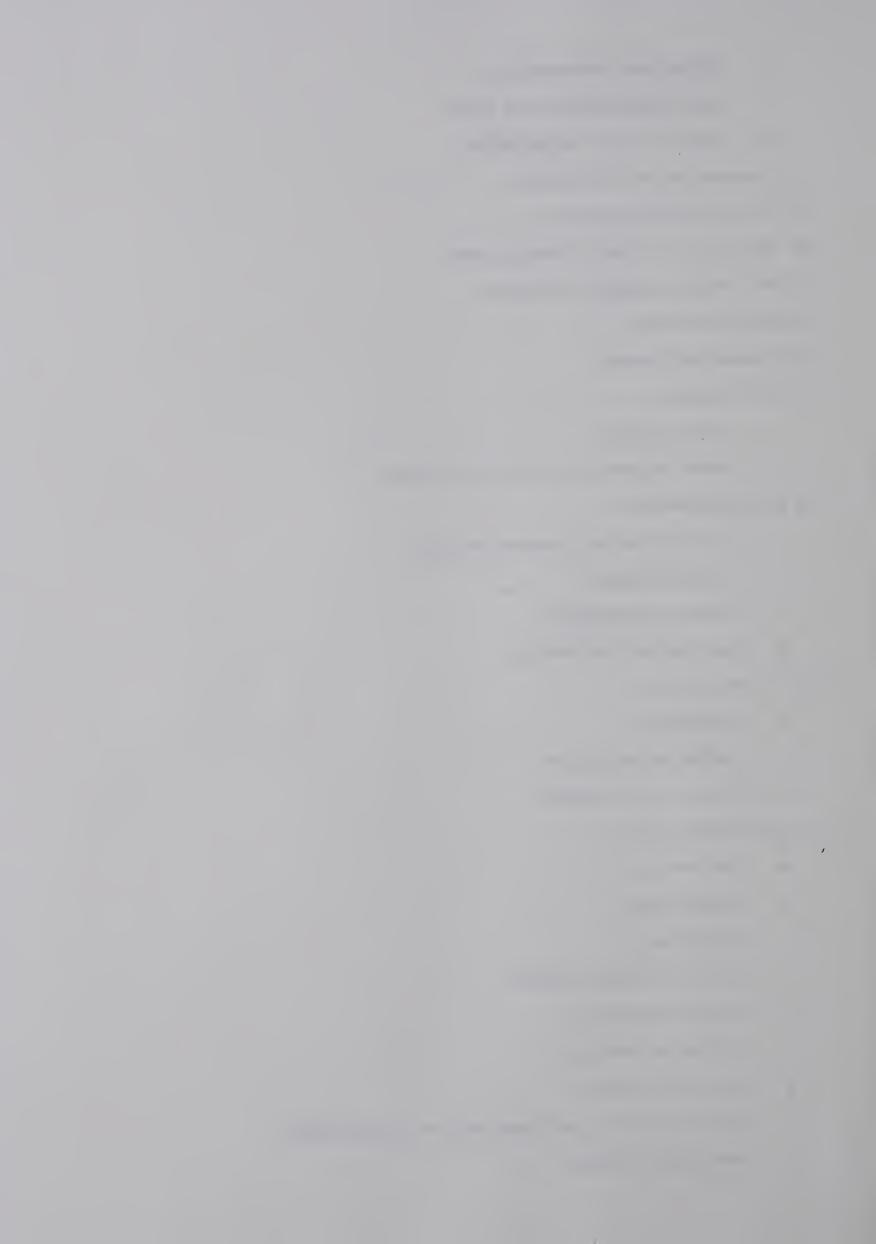
128. anticipated behavior

    a.   not sure what their response would be

    b.   it would be chaos

    c.   children will misbehave

    d.   they won't do it otherwise

129. children's memory

    a.   recall skills

    b.   children will remember

    c.   children didn't remember

130. unacceptable behavior

    a.   their behavior

    b.   children talking

    c.   children noisy

    d.   children not paying attention

    e.   children misbehaving

    f.   children not listening

    g.   it was a little chaotic

    h.   children interfering with other children, disrupting class

    i.   unacceptable behavior

j.   children not acting cooperatively

131. kind of class

   a.   children's age or grade

   b.   kind of class

   c.   the class was off that day

   d.   suit the activity to the class
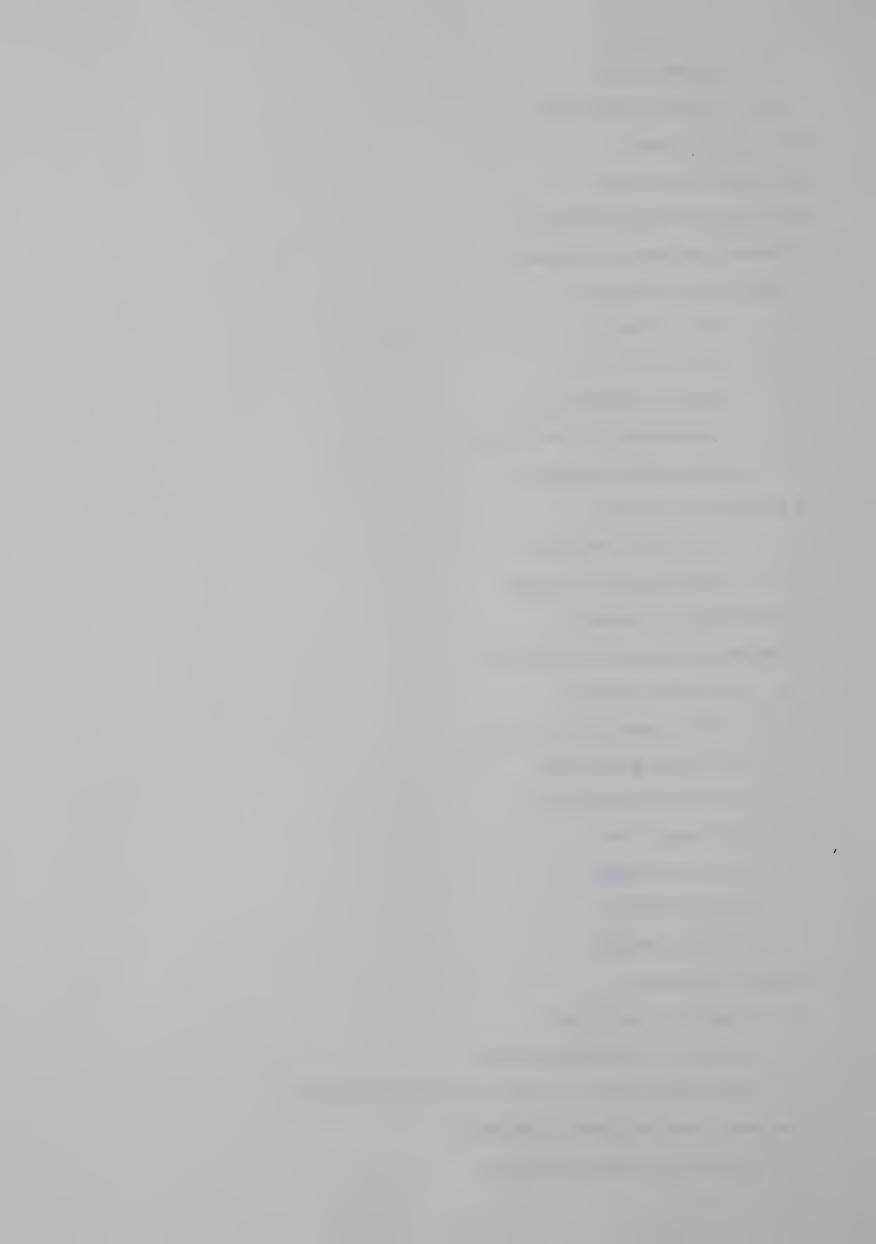
132. creative decisions

   a.   children will realize there are alternatives

   b.   get children to think

   c.   gives them a chance to think

   d.   children should be active participants

   e.   children should be able to make their own decisions

   f.   wanted them to experiment, explore

   g.   to be creative, some independence without directions from me

   h.   to use their imaginations

   i.   freedom of choice, give a choice

133. projected needs

   a.   they need to concentrate

   b.   need to realize what they can do

   c.   children need to take responsibility

   d.   children needed it

   e.   children need to listen

   f.   children need to internalize theme

   g.   children needed direction

   h.   children need to use their imaginations

   i.   children need to experience things

134. I am a student teacher

135. I wanted to rework the material

136. setting an example

   a.   children will pick up what I'm doing

   b.   setting a good example

    c.   I was the model

    d.   I wanted to show them

137. it is not my class

138. I wanted to know why

139. I'm trying something different

140. I didn't want them overexcited

141. ideas, beliefs, philosophy

    a.   it didn't matter

    b.   it is worth it

    c.   I think it is important

    d.   it is important for them to learn

    e.   ideas, beliefs, philosophy

142. activity for the teacher

    a.   I was going to be active

    b.   I was not going to be active

143. I didn't notice, I missed it

144. children giving appropriate response

    a.   anticipated reponse

    b.   children responding very well

    c.   child doing activity well

    d.   expected student behavior

145. children's energy level

    a.   they were fidgity

    b.   they were tired

    c.   children energetic

146. care of equipment

    a.   respect for equipment

    b.   take out or put away equipment

    c.   they should learn how to take out, care for equipment

147. no control over equipment organization

    a.   other group sets up equipment

b.   equipment was already there

c.   equipment was set up that way

148. easy to manipulate

149. the activity

APPENDIX K

151

FINAL LIST OF VARIABLES

VARIABLES

1. to promote student togetherness as a group

   a. cooperative

   b. gives them a feeling of community

   c. gets them together

   d. for togetherness as a group

2. giving reinforcement

   a. reinforcement

   b. reinforce theme

   c. giving recognition and praise

3. teacher giving feedback

   a. compare and contrast to pinpoint the differences

   b. exaggerate important aspects

   c. feedback

   d. coaching points

   e. point out key points

   f. guidance

4. use of cues

   a. cues

   b. wanted to use visual cues

   c. wanted them to see it

   d. if you show them they remember

   e. a picture is worth a thousand words

   f. wanted to use audio cues

   g. so they could hear me

   h. I wanted tham to be able to hear

   i. children listen better if you use a variety of cues

   j. sound carries better

   k. it's loud

   l. my voice doesn't project

   m. could see everybody

       n.   so I can see them

       o.   they could see me

5.   organization

       a.   establishing a routine

       b.   divide into groups

       c.   get them to a certain area

6.   giving an explanation

       a.   get the point across

       b.   clarification

       c.   for understanding

       d.   explanation

7.   teacher extending performance

       a.   take behavior and shape it

       b.   pinpoint alternatives

       c.   expand the activity

       d.   try different things

       e.   for variety

       f.   point out variations

       g.   give examples

       h.   give them ideas

8.   equipment availability

       a.   space/equipment might as well be used

       b.   equipment not being used

       c.   equipment/material available

       d.   equipment not available

       e.   sufficient equipment

       f.   insufficient equipment

       g.   amount of equipment

       h.   equipment broken

       i.   equipment problems

       j.   have to adapt to equipment available
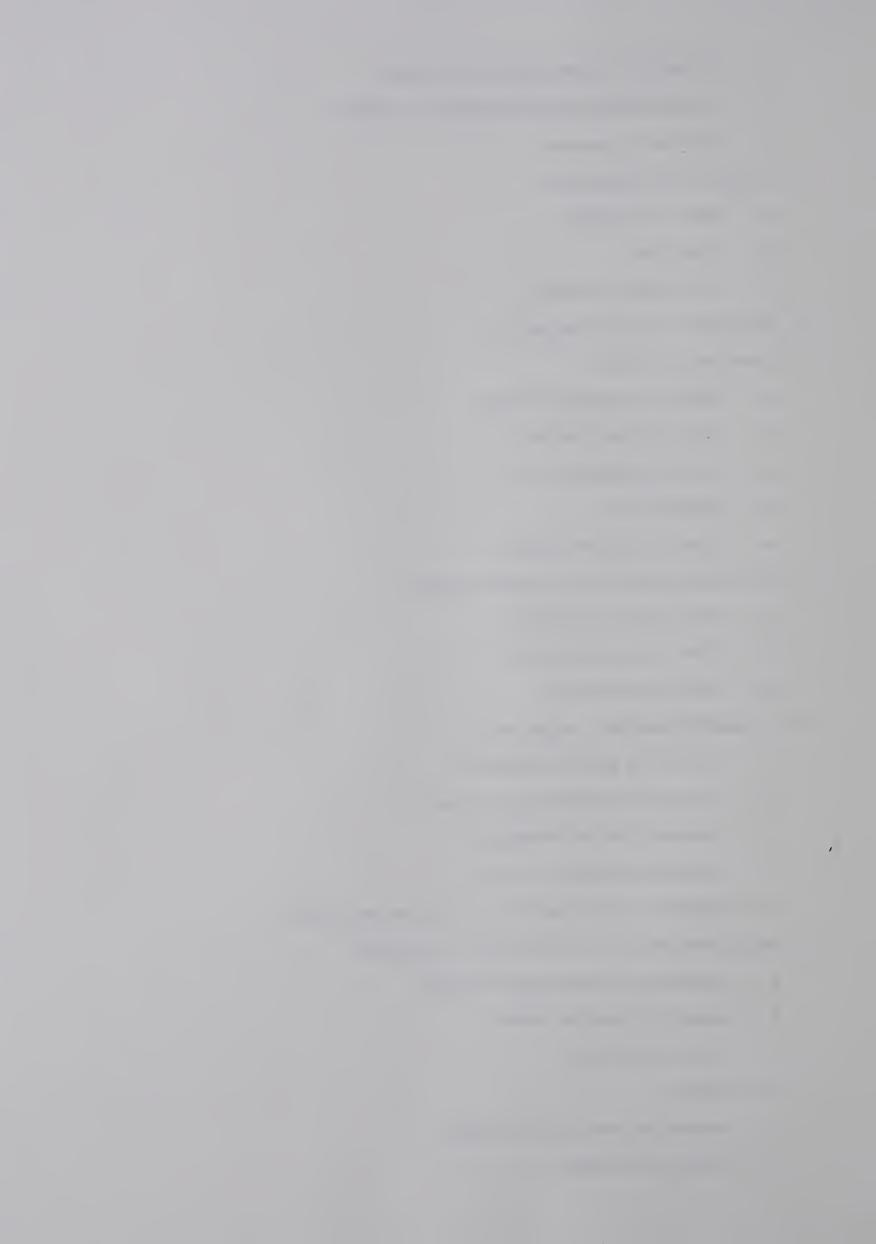
9. emotional status of teacher

   a. insecure, I'm afraid I might forget

   b. I was unsure

   c. security blanket

   d. I was uncomfortable

   e. I am uncomfortable with it

   f. I am more comfortable with the children

   g. I am comfortable with it

   h. I was confused

   i. I was angry

   j. I was running out of patience

   k. I had had enough

   l. I wasn't worried about it

   m. my mind was on other things

   n. I was distracted

   o. I was interested

   p. it bothers me

   q. my mood

   r. I felt badly about it

   s. I was upset

   t. I was dreading it

   u. I'm nervous of that activity

   v. I was impatient

10. extra-classroom influences

   a. community

   b. curriculum

   c. school procedures and policy

   d. legal responsibility

11. cooperating teacher's position in regards to evaluating the education practicum

   a. I am just a student teacher

   b. cooperating teacher's expectations

c.   cooperating teacher viewed lesson plans

d.   worried about cooperating teacher's reaction

e.   I was being evaluated

12.   people observing me teach

a.   faculty consultant

b.   researcher

c.   other teacher watching

13.   movement supervisor suggested it   .

14.   university education

a.   movement education courses

b.   early childhood courses

c.   movement education theory

d.   teaching theory

e.   university/teacher training

15.   other experiences prior to student teaching

a.   work experiences (CMEP)

b.   other activity experiences

c.   books read by teacher

16.   cooperating teacher's suggestion

a.   cooperating teacher suggested it

b.   cooperating teacher recommended it

c.   cooperating techer requested it

d.   cooperating teacher's decision

e.   decided in cooperation with the cooperating teacher

17.   people who have been role models for the teacher

a.   cooperating teacher does it this way

b.   cooperating teacher's style

c.   cooperating teacher

d.   friends

e.   saw another teacher do it that way

f.   university professors

g.   teachers I have had

18.   classroom routine set up prior to student teaching

a.   consistency

b.   does not have proper footwear

c.   class procedure and policy

d.   the children are used to it that way

e.   children's habit to line up this way

19.   children's physical capabilities

a.   they could do more

b.   children's physical capabilities

c.   children's size

d.   they can do it

e.   they can't do it well

f.   they are capable of doing more

g.   children's age or grade

20.   children's level and experience

a.   children's level and experience

b.   one group of children better than others

c.   children's abilities

d.   children not advanced enough

e.   don't know their body parts

f.   they haven't had enough experience

g.   previous experiences of class

h.   no experience with this activity

i.   they are not familiar with the activity

j.   children didn't know this

k.   they are familiar with the activity

l.   children's first time

m.   something they are familiar with

n.   children know they will get a turn

21.   affective goals for children

a.   children will feel more comfortable

b.   they will have a good self-concept

c.   they will feel success

d.   they will feel secure

22. children's work habits

a.   children work better by themselves

b.   work better with members of their own sex

c.   work better alone

d.   they do not work well in groups

23. teacher focusing performance

a.   give them a focus

b.   give them an objective

c.   give them a point of reference

24. spontaneous teacher behavior

a.   it was unconscious

b.   it was the first thing I thought of

c.   it came out of my head

d.   it was spontaneous

e.   that is how it worked out

25. safety

a.   safety

b.   activity was potentially dangerous

c.   I thought it was safe

26. children's era

a.   popular children's artist

b.   children could identify with it

27. the equipment/stimulus was appropriate for the activity

a.   it was easy to manipulate

b.   because of the stimulus

c.   activity fits with the music

d.   fits in with activity

e.   music too complex

f.   music was recorded on tape

28.   other issues impinging on the environment

   a.   my clothing

   b.   it was the last day

   c.   the weather

   d.   spring/easter break was coming

   e.   time of day of lesson

   f.   temperature

29.   amount of structure the teacher desired for the learning environment

   a.   for conformity, wanted everyone the same

   b.   wanted to be really specific

   c.   give them directions

   d.   wanted an unstructured environment

   e.   needed a structured activity

30.   acclimatize the children

   a.   get used to environment/stimulus

   b.   get used to the activity

31.   the gym environment

   a.   stage is higher

   b.   the environment

   c.   lots of room

   d.   too many distractions in the gym

   e.   size of gym

   f.   sound carries to other classrooms

32.   giving aid to the children

   a.   I hoped I could help

   b.   it would help them

   c.   helping

   d.   individual help

33.   efficient use of time

a. wanted it done quickly

b. efficient use of time

c. get on with it

d. saves time

e. could get started right away

f. enough time had been spent on it

g. takes away from gym time

h. wastes time

i. would take too much time

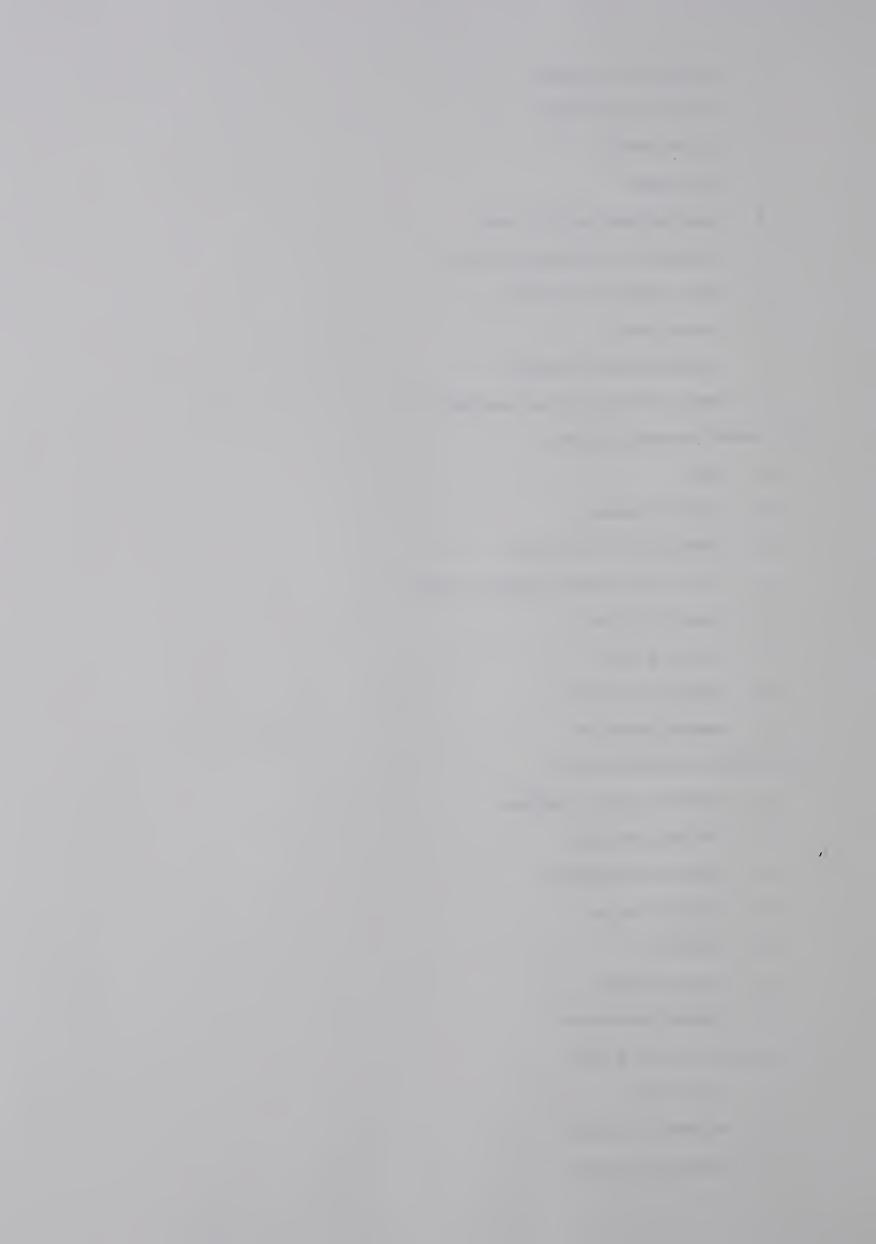j. time required to set up equipment

34. limited time/time available

a. time

b. time for planning

c. limited time with this class

d. it took longer than I thought it would

e. insufficient time

f. we were late

g. running out of time

h. needed more time

35. children't emotional status

a. children's mood or attitude

b. children distracted

c. children discouraged

d. children excited

e. they like it

f. they don't like it

g. children complained

36. numbers/size of group

a. size of class

b. number of children

c. number of groups

37. warmdown

   a.   warmdown

   b.   quiet activity

   c.   calming activity

   d.   time to cool down

38. introductory activity

   a.   warmup

   b.   basis to start, a lead in

   c.   introductory activity

   d.   introduction

   e.   get the children responding/started

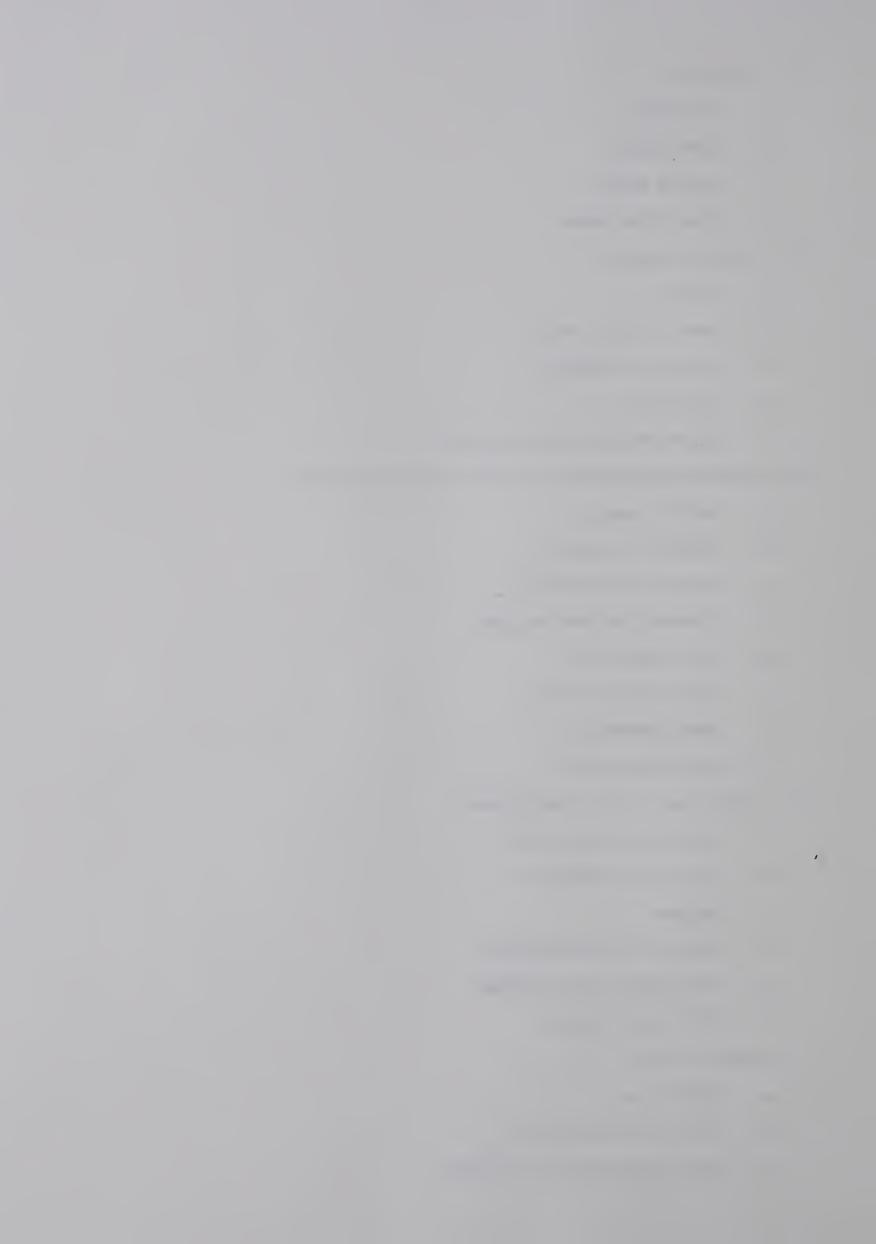39. amount of physical activity involved in the lesson/activity

   a.   burn off energy

   b.   frequency of activity

   c.   wanted physical activity

   d.   no elimination from the game

   e.   all should be active

   f.   more children are active

   g.   keeps children busy

   h.   get the child active

40. children's lack of disruptive behavior

   a.   most of them were quiet

   b.   children paying attention

   c.   manners

   d.   children not disrupting class

   e.   their behavior was acceptable

   f.   children not off task

41. children copying

   a.   children copy

   b.   children would copy me

   c.   they weren't coming up with ideas

    d.   children don't think of alternative

    e.   all doing it the same way

42. children decided

    a.   child volunteered

    b.   child(ren) suggested it

    c.   children decided
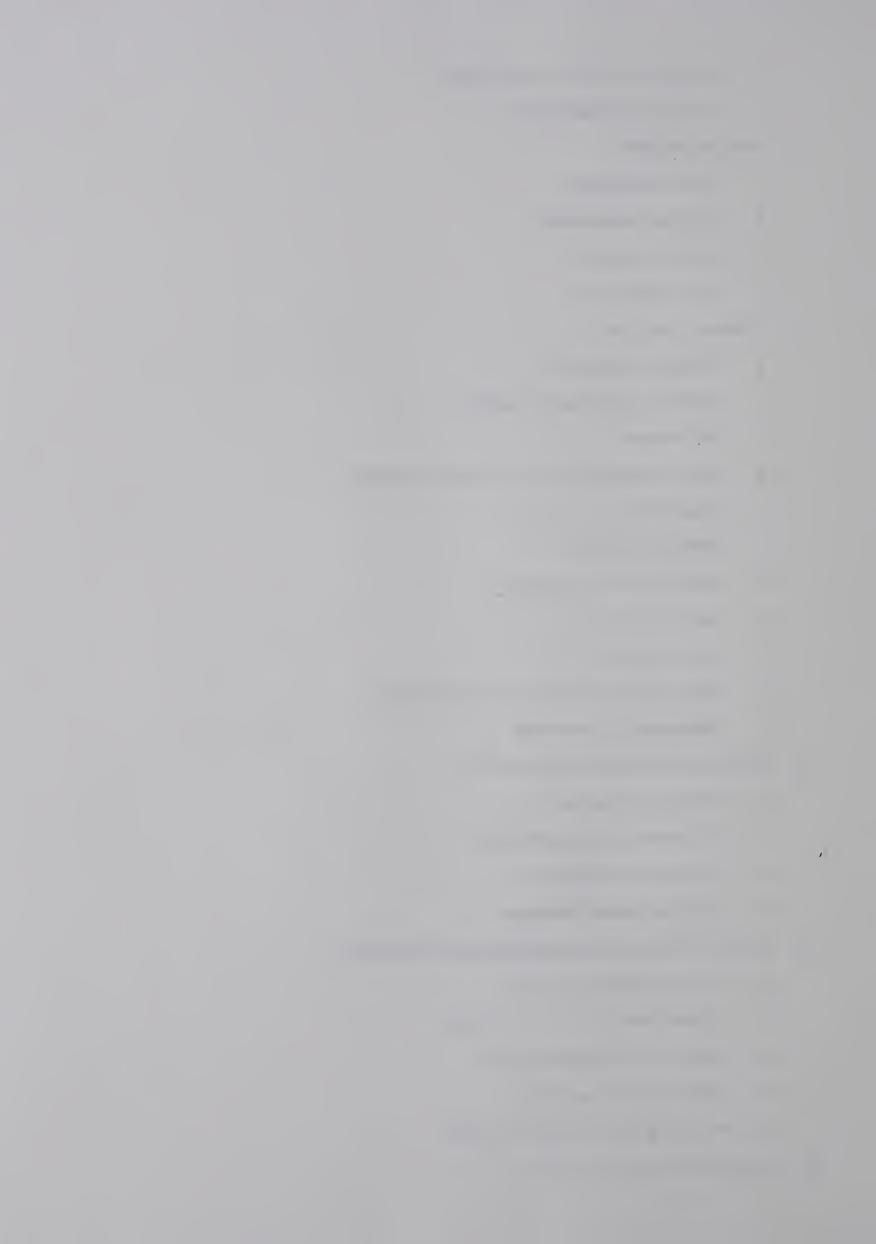
    d.   they asked for it

43. children's response

    a.   children's response

    b.   children's response or reaction

    c.   the children

    d.   I was responding to the children's response

    e.   I was going with the flow

    f.   activity improved

    g.   suit the activity to the class

    h.   they deserved it

    i.   a new response

    j.   child's response was interesting, different

    k.   children didn't remember

44. children giving appropriate response

    a.   anticipated reponse

    b.   children responding very well

    c.   child doing activity well

    d.   expected student behavior

45. children not giving expected/appropriate response

    a.   not the expected reponse

    b.   children doing the activity wrong

    c.   children not responding well

    d.   their response was slow

    e.   not doing what I wanted, off task

46. characteristics of the activity
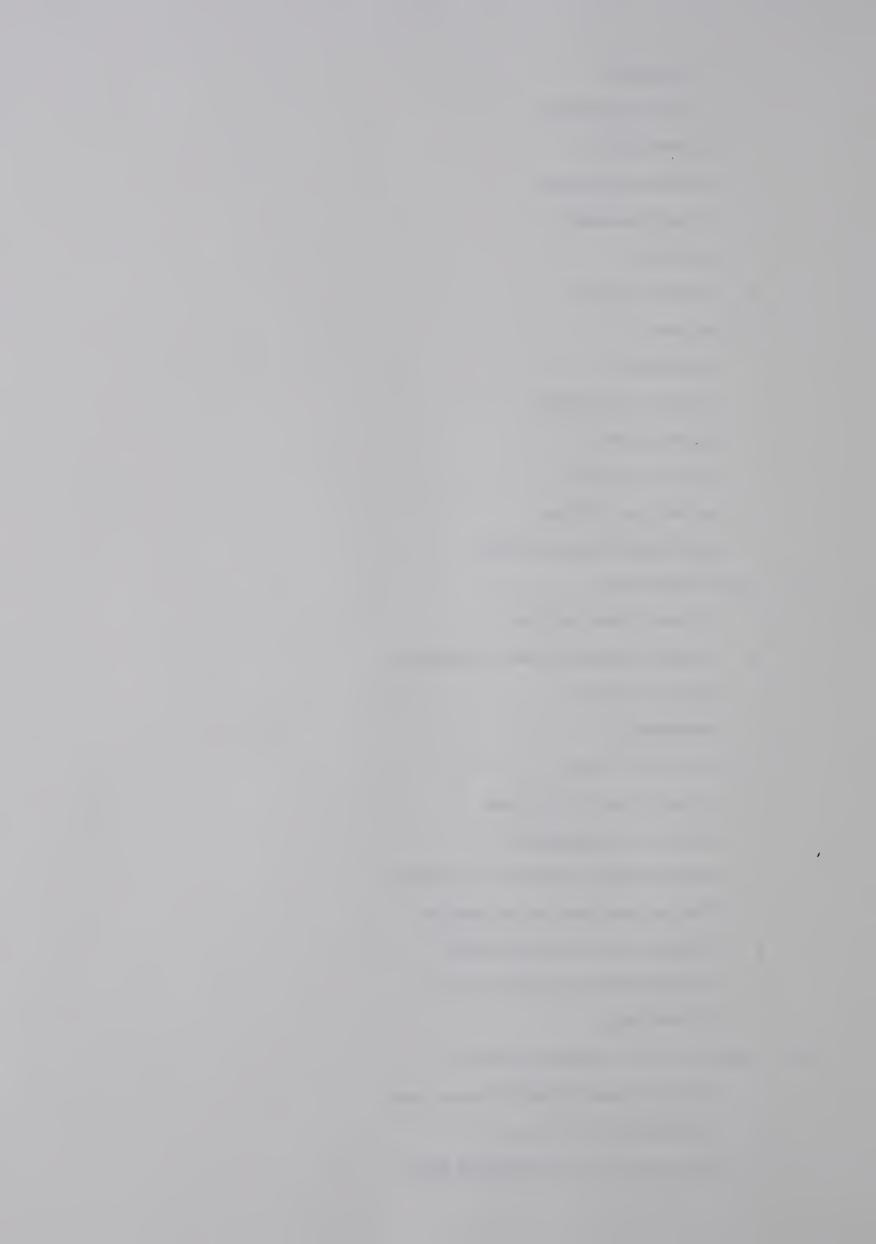
a. a challenge

b. varies presentation

c. novelty activity

d. something different

e. it was interesting

f. a gimmick

g. change of pace

h. a break

i. the activity

j. it was fun/enjoyable

k. activity boring

l. activity too easy

m. activity too difficult

n. good cardiovascular activity

47. use of observation

a. to watch other children

b. wanted to see what they were doing

c. get an overview

d. observation

e. make sure on task

f. to see if they were on task

g. check for understanding

h. watch students to check for response

i. find out their level and experience

j. wanted to see what was wrong

k. wanted to see what they could do

l. to make sure

48. teacher's beliefs concerning children

a. children shouldn't stand in line and wait

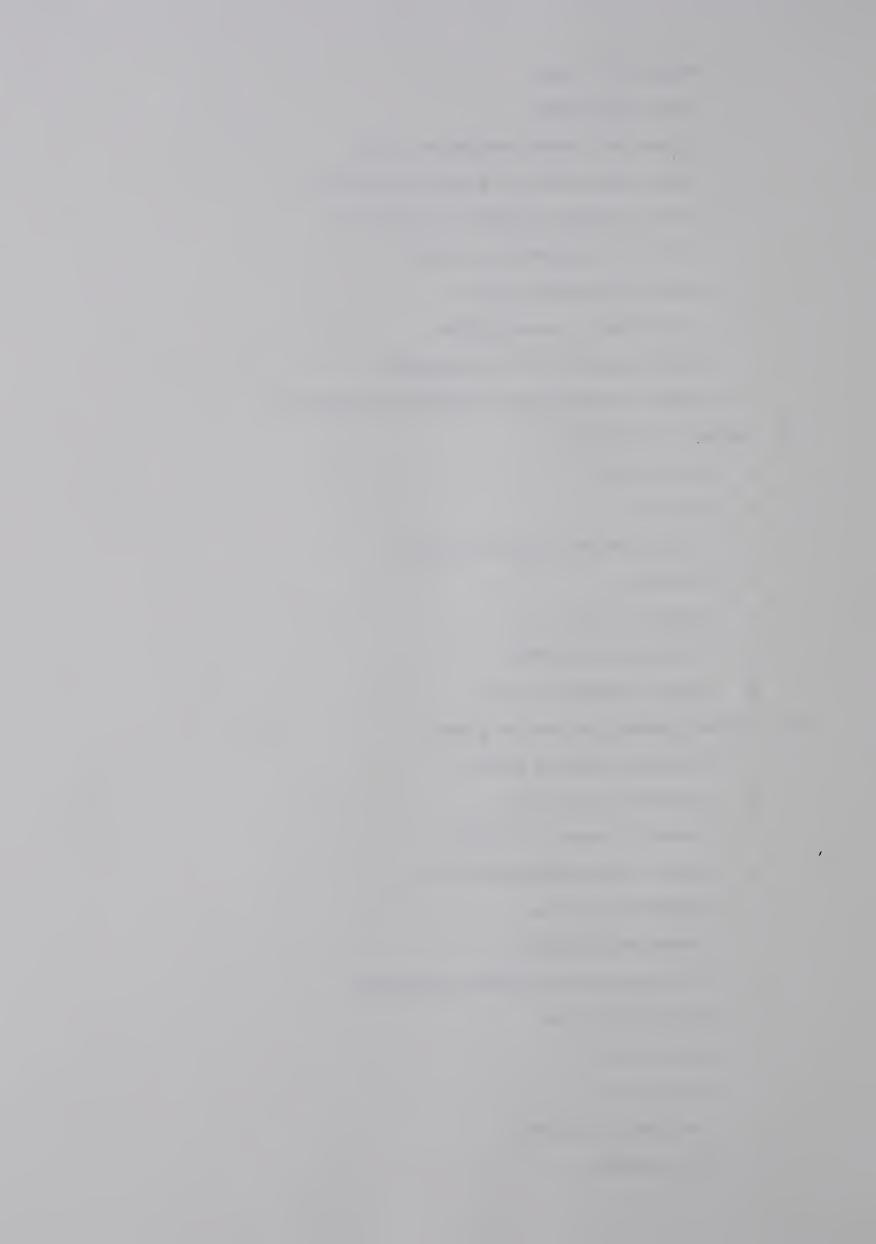b. children don't like to wait

c. children can overestimate their ability

    d.   children find it easier

    e.   children don't do this

    f.   children don't realize what they are doing

    g.   children will act well if it is an activity they like

    h.   if they are close to me they will cooperate

    i.   children like recognition and praise

    j.   children are naturally curious

    k.   children tend to crowd together

    l.   children should be activity participants

    m.   children should be able to make their own decisions

49. teacher's physical status

    a.   I've been sick

    b.   I'm tired

    c.   it would take too much of my energy

    d.   my vision

    e.   it saves my voice

    f.   I was going to be active

    g.   I was not going to be active

50. teacher's desires, personal preference

    a.   I wanted to finish the activity

    b.   I wanted to know why

    c.   I wanted to rework the material

    d.   I didn't want everything brand new

    e.   I needed the practice

    f.   I needed the exposure

    g.   I like to be part of the class, to participate

    h.   personal preference

    i.   I like it, it's fun

    j.   I do not like it

    k.   I can identify with that

    l.   my personality

m.   me

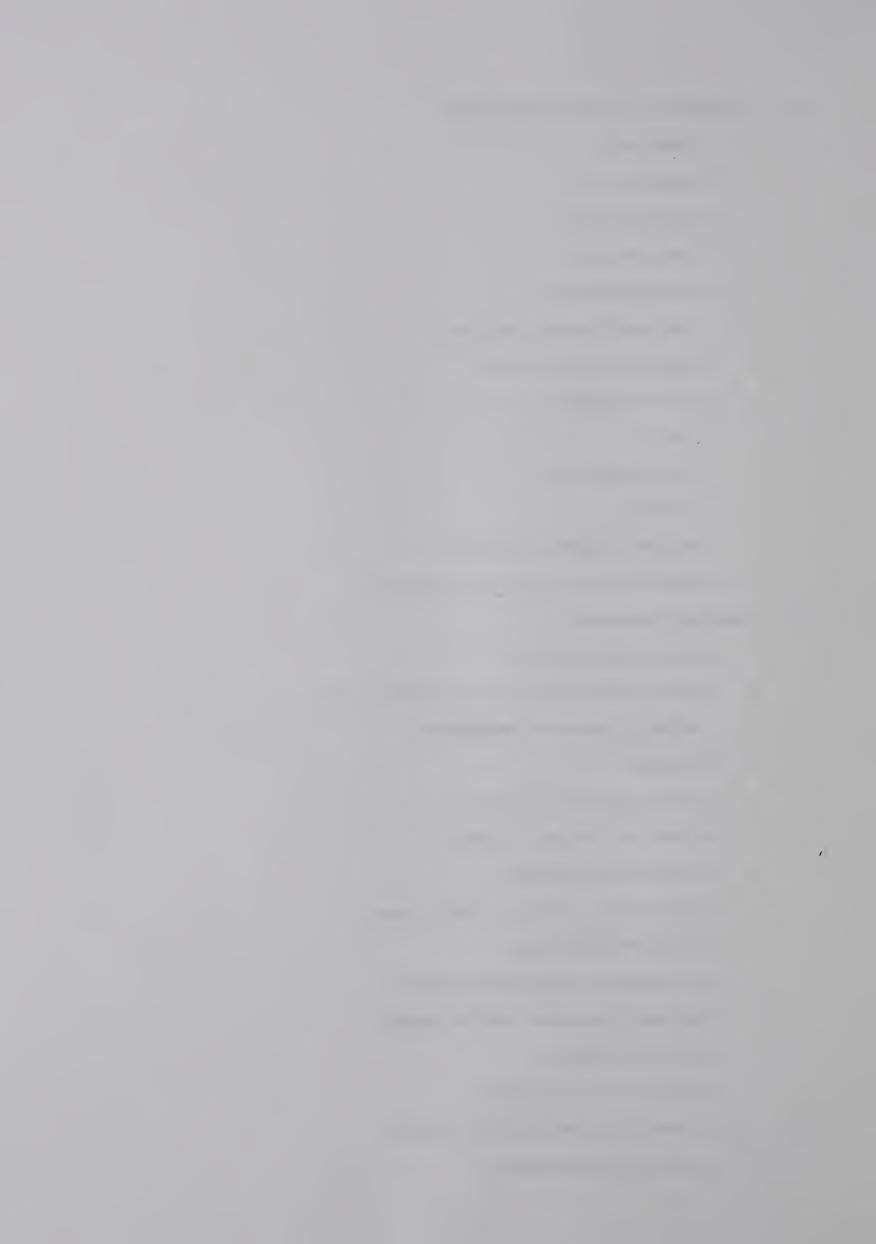51.   workability of the activity/lesson plan

    a.   it didn't work

    b.   it doesn't work

    c.   it wasn't working

    d.   it wouldn't work

    e.   nothing works out

    f.   it will make the lesson successful

    g.   convenient/makes it easier

    h.   it was manageable

    i.   it works

    j.   it was the best way

    k.   it is logical

    l.   I thought it would work better
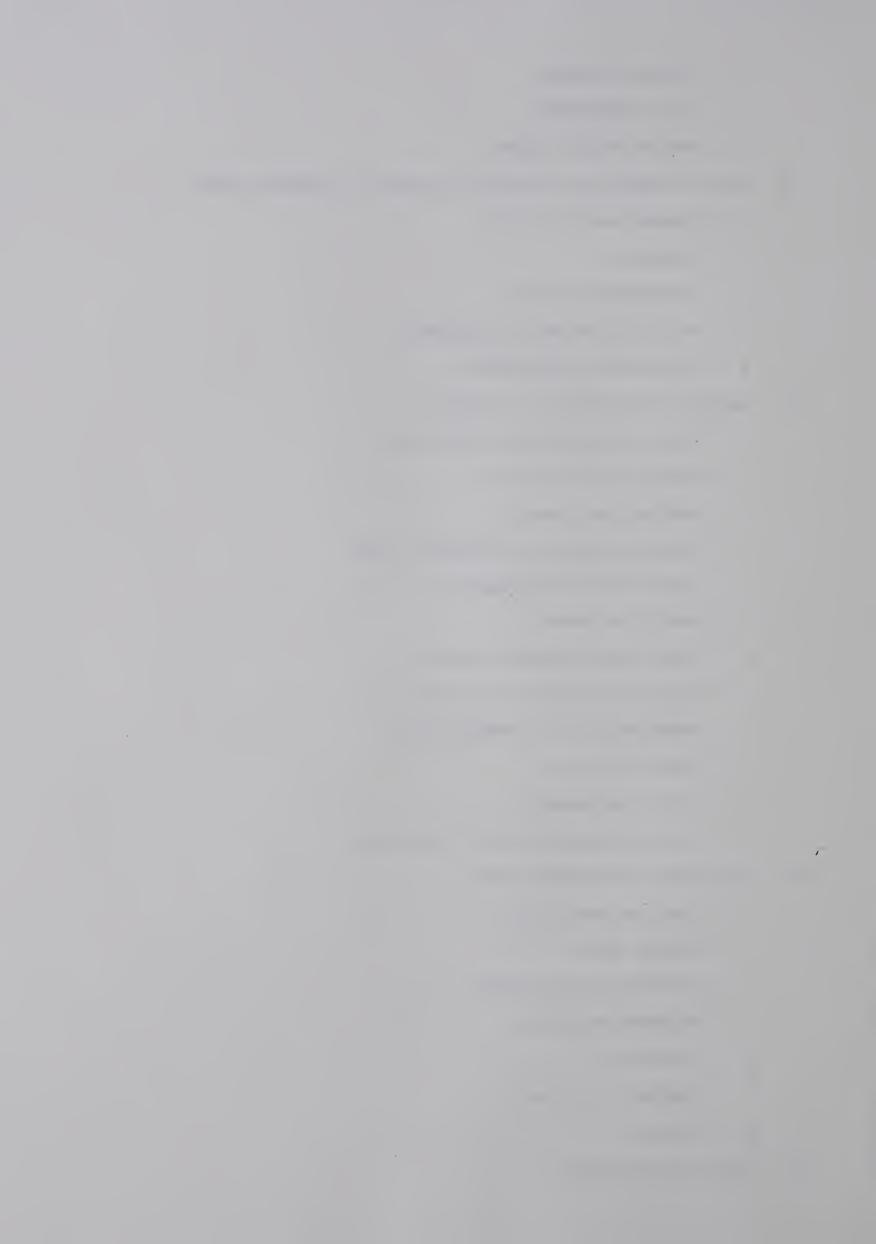
    m.   seemed to be the thing to do at the time

52.   classroom management

    a.   keeps children on task

    b.   need a physical separation so they won't fight

    c.   control or classroom management

    d.   discipline

    e.   discipline would work with him

    f.   to remove from fun, to isolate

    g.   separate certain children

    h.   must be options to return them to class

    i.   bring them back on task

    j.   they needed to change their behavior

    k.   take away from other children's activity

    l.   minimize problems

    m.   prevent disruptive behavior

53.   children needed help/were having problems

    a.   children not understanding

b. child needs attention

c. children needed help

d. children having problems

54. teacher's belief that the material is important for children to know

a. children should know this

b. awareness

c. I wanted them to know

d. wanted to give them the experience

e. I wanted them to understand

55. sequence and progression of material

a. I had previously explained the material

b. leads into the next activity

c. material already covered

d. continue in gym what working on in class

e. I was working in that direction

f. result of last lesson

g. theme could be expanded, built on

h. sequence progression of material

i. activity needed later in lesson or unit

j. activity in last class

k. activity in last lesson

l. it would interrupt the flow of the lesson

56. significance of the lesson material

a. introduces new concepts

b. develops skills

c. important aspect of activity

d. important basic activity

e. recall skills

f. repetition is important

g. practice

57. lesson theme/objective

    a.   a movement concept

    b.   an activity we're working on

    c.   theme for the day

    d.   not theme for the day

    e.   objective of lesson

    f.   exercise

    g.   the lesson plan

    h.   following my plan

58.   giving a review

    a.   summarize

    b.   review

    c.   reminding children

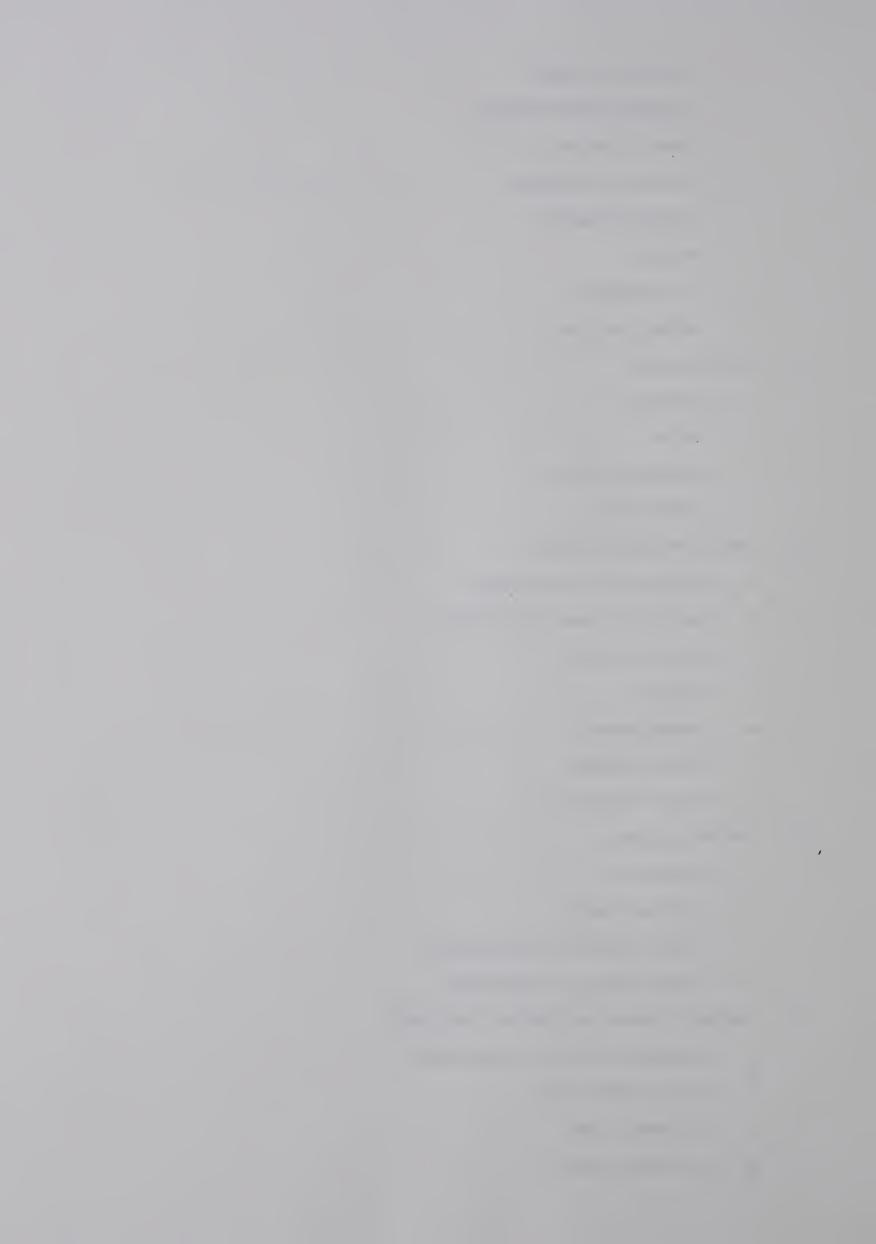   d.   redefine action

59.   teacher motivating children

    a.   gets/captures their attention

    b.   get them involved, a commitment

    c.   sets atmosphere

    d.   motivate

    e.   encouragement

    f.   make it exciting

    g.   make it interesting

60.   teacher's abilities

    a.   my abilities

    b.   I don't do it well

    c.   I wasn't able to do it all by myself

    d.   I didn't want to try it by myself

61.   teacher's previous experiences with activity

    a.   experience with other class/activity

    b.   I've tried other things

    c.   it's a habit I have

    d.   I am familiar with it

e. my prior experience with the activity

f. it is not what I'm used to

g. that is what I know

h. I work from what I know

i. that is the way I do it

j. I haven't done this before

k. I use this activity a lot

l. the things I enjoyed as a child

m. I was trying something different

n. gives me ideas
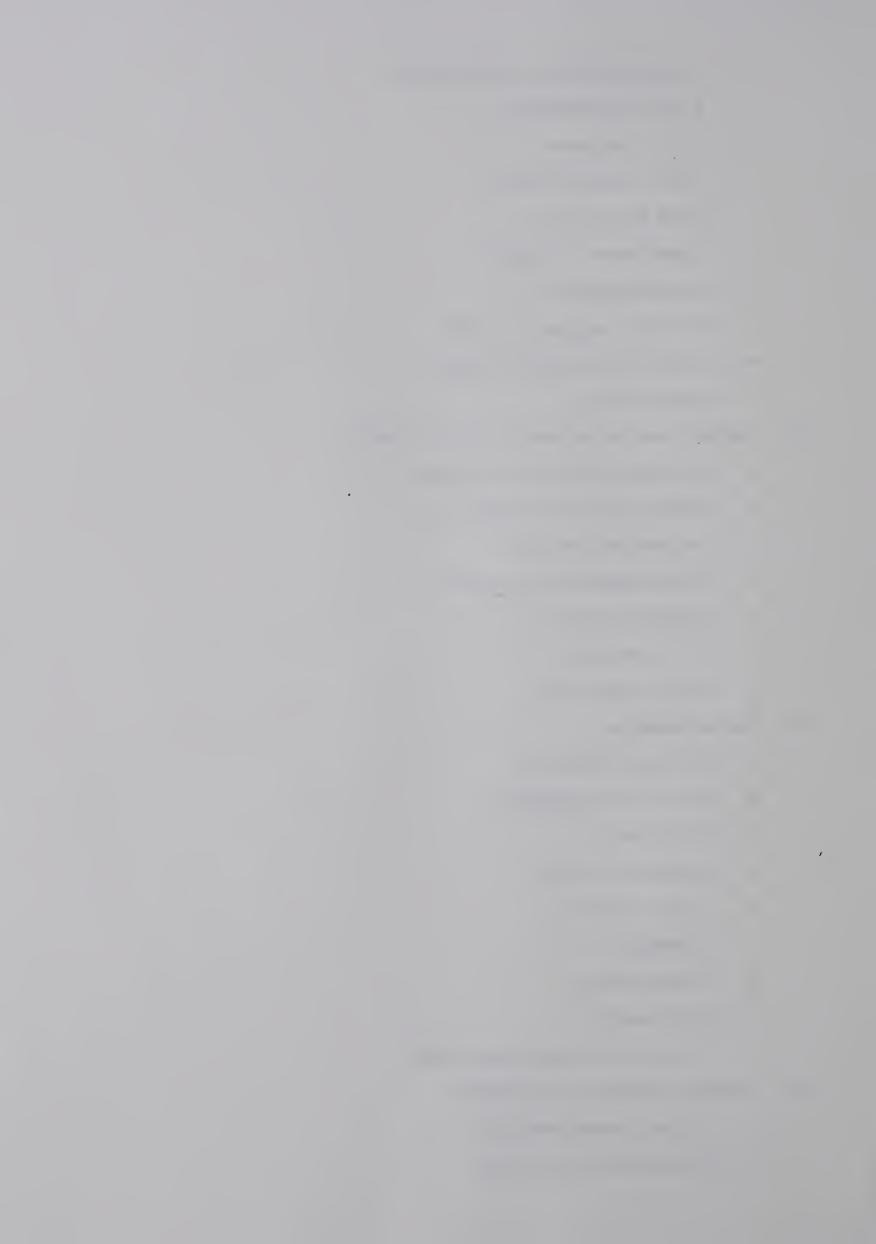
62. teacher's previous experiences with the children

a. previous experience with this class

b. other experiences throughout day

c. first time with this class

d. I am not familiar with the children

e. I knew their names

f. it is not my class

g. it is that kind of class

63. teacher's decision

a. that is what I asked for

b. that is the way I explained it

c. I didn't have to

d. I decided not to do it

e. I chose to ignore it

f. I wanted to

g. I chose to do it

h. I didn't want to

i. I didn't want to move the equipment

64. children's completion of the activity

a. they had finished something

b. children had finished activity

c.   some children did not have a turn

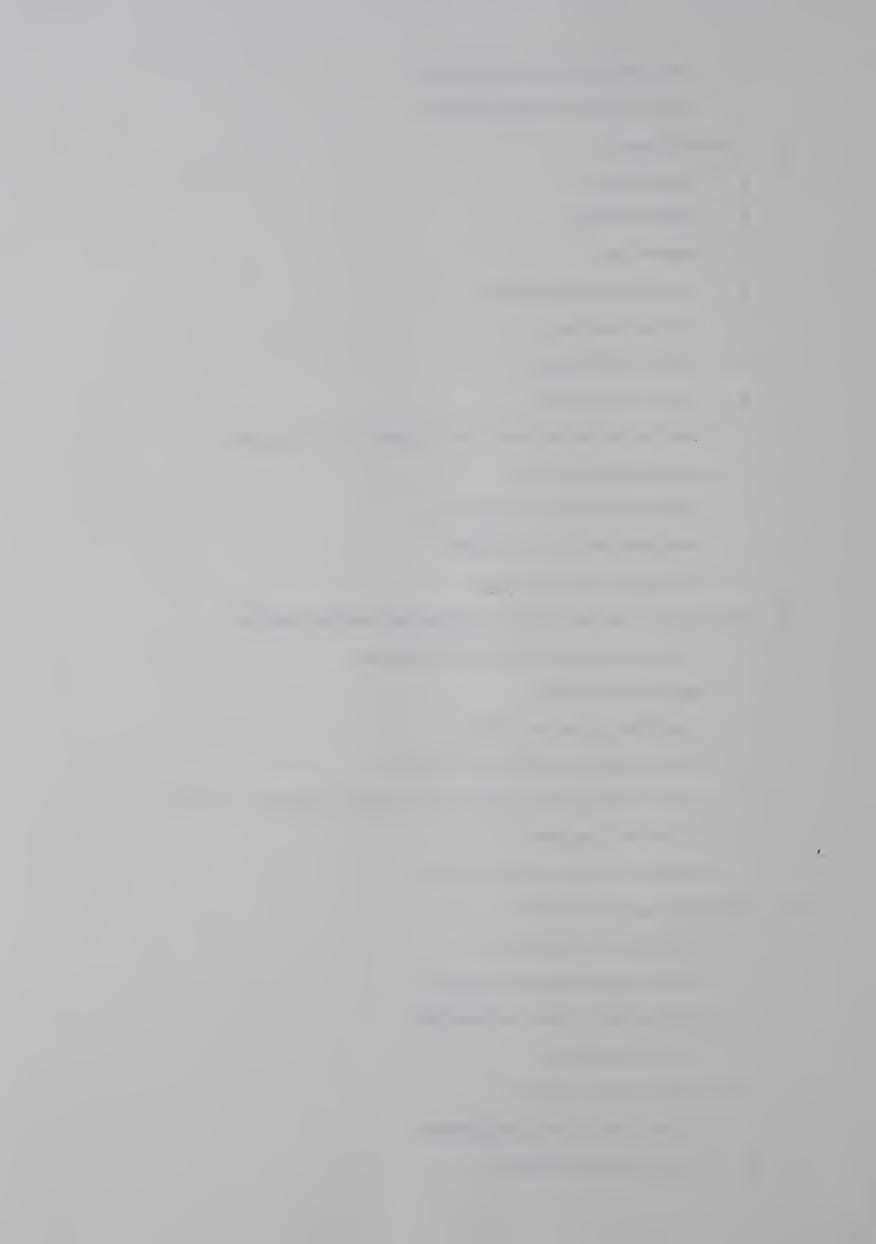d.   children had not finished activity

65. children's behavior

a.   their behavior

b.   children talking

c.   children noisy

d.   children not paying attention

e.   children misbehaving   ,

f.   children not listening

g.   it was a little chaotic

h.   children interfering with other children, disrupting class

i.   unacceptable behavior

j.   children not acting cooperatively

k.   child does not participate well

l.   the class was off that day

66. gives children the opportunity to make decisions/be creative

a.   children will realize there are alternatives

b.   get children to think

c.   gives them a chance to think

d.   wanted them to experiment, explore

e.   to be creative, some independence without directions from me

f.   to use their imaginations

g.   freedom of choice, give a choice

67. projected needs of children

a.   they need to concentrate

b.   need to realize what they can do

c.   children need to take responsibility

d.   children needed it

e.   children need to listen

f.   children need to internalize theme

g.   children needed direction

    h.   children need to use their imaginations

    i.   children need to experience things

    j.   children need practice

68. setting an example for the children

    a.   children will pick up what I'm doing

    b.   setting a good example

    c.   I was the model

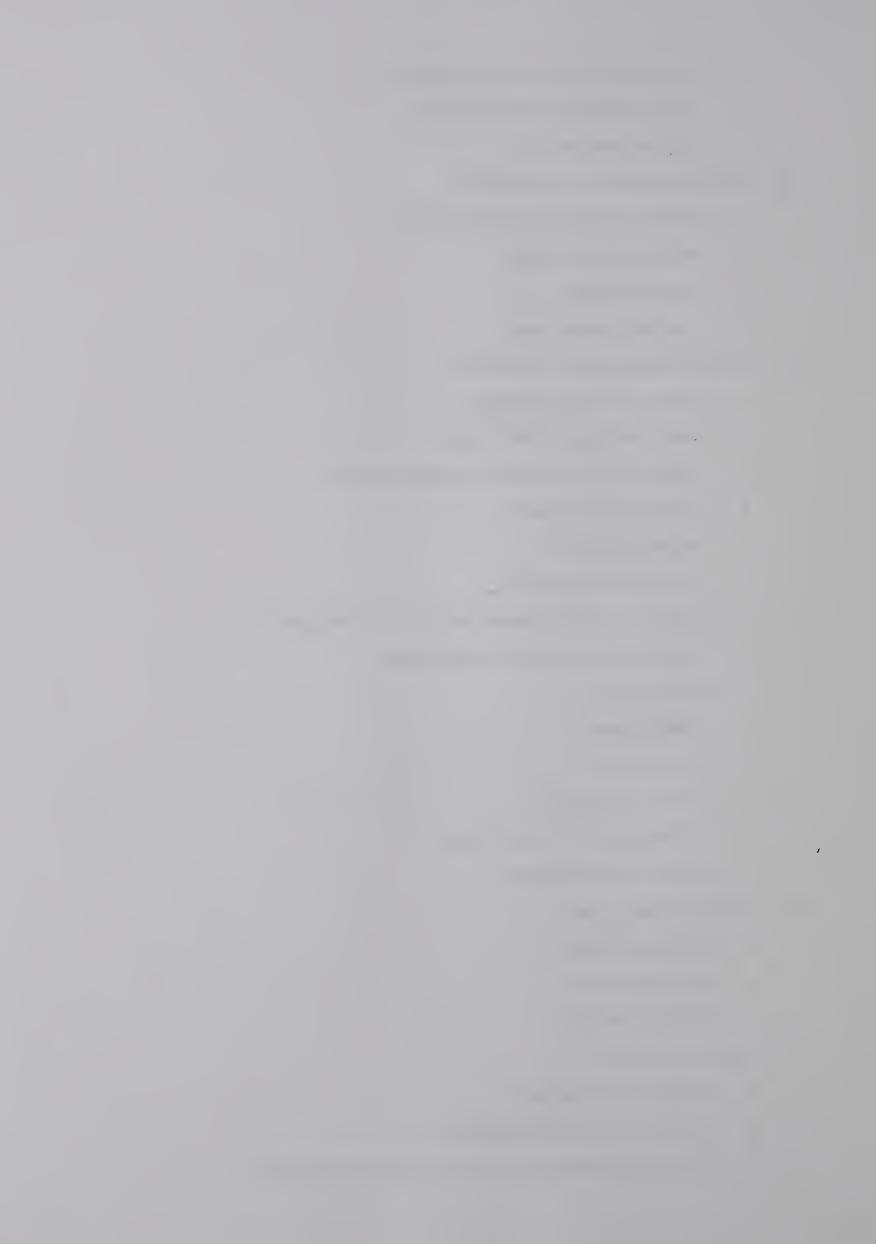   d.   I wanted to show them

69. teacher's ideas, beliefs, philosophy

    a.   instruction time is important

    b.   important to use correct terms

    c.   children should not suffer because of some

    d.   individualized program

    e.   makes it personal

    f.   you can be too specific

    g.   children should be familiar with who is in the room

    h.   children should know my expectations

    i.   it is their time

    j.   it didn't matter

    k.   it is worth it

    l.   I think it is important

    m.   it is important for them to learn

    n.   ideas, beliefs, philosophy

70. children's energy level

    a.   they were fidgity

    b.   they were tired

    c.   children energetic

71. care of equipment

    a.   respect for equipment

    b.   take out or put away equipment

    c.   they should learn how to take out, care for equipment

72. no control over equipment organization

    a.   other group sets up equipment

    b.   equipment was already there

    c.   equipment was set up that way

73. negative concerns regarding my teaching performance

    a.   I didn't explain it well

    b.   I couldn't think of another way

    c.   I forgot

    d.   it is a hassle

    e.   things weren't going my way

    f.   I didn't notice, I missed it

    g.   I hadn't thought of it

    h.   no reason

    i.   I don't know

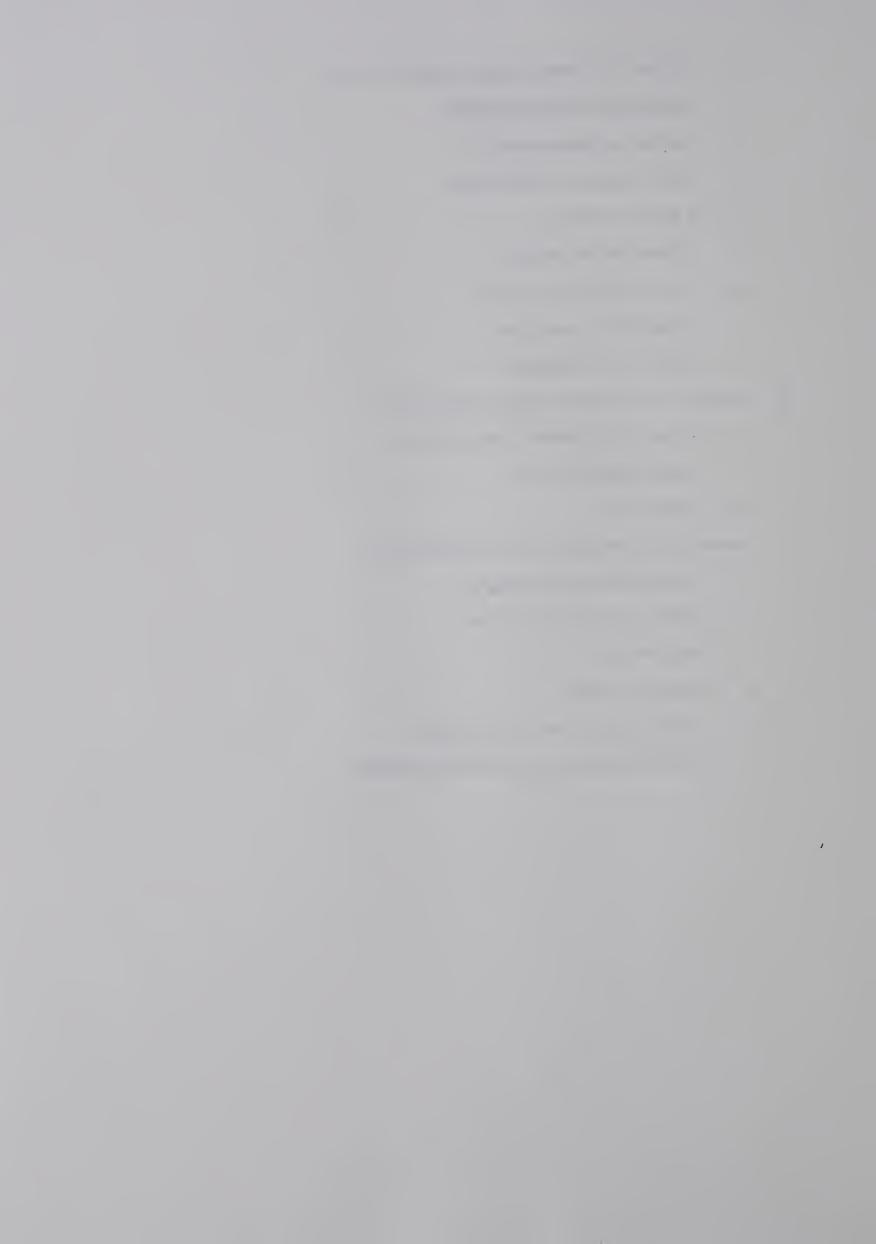   j.   I didn't look at my lesson plan

74. needed to adapt lesson plan

    a.   focus of lesson shifted

    b.   needed one more activity

    c.   they had had enough of that activity

    d.   have to adapt

75. teacher's expectations

    a.   my expectations

    b.   I hoped I could influence the student

    c.   I wanted them to tell me what they were doing

    d.   children will react better try harder

    e.   they would have room to move freely

    f.   gives children leadership experiences

    g.   they could show what I wanted

    h.   they run towards the equipment

    i.   they may knock over the equipment

    j.   not sure what their response would be

k.   I did not want them doing a certain activity

l.   I expected a certain response

m.   I wanted a certain activity

n.   I didn't want them overexcited

o.   it would be chaos

p.   children will misbehave

q.   they won't do it otherwise

r.   I thought they knew that

s.   children will remember

76.   teacher's awareness of what was occurring

a.   I knew which children were involved

b.   I was talking too much

c.   I lost control

77.   material less confusing/children can manage it

a.   it would have confused them

b.   I didn't want to confuse them

c.   less confusing

d.   keeping it simple

e.   children would have to shift focus
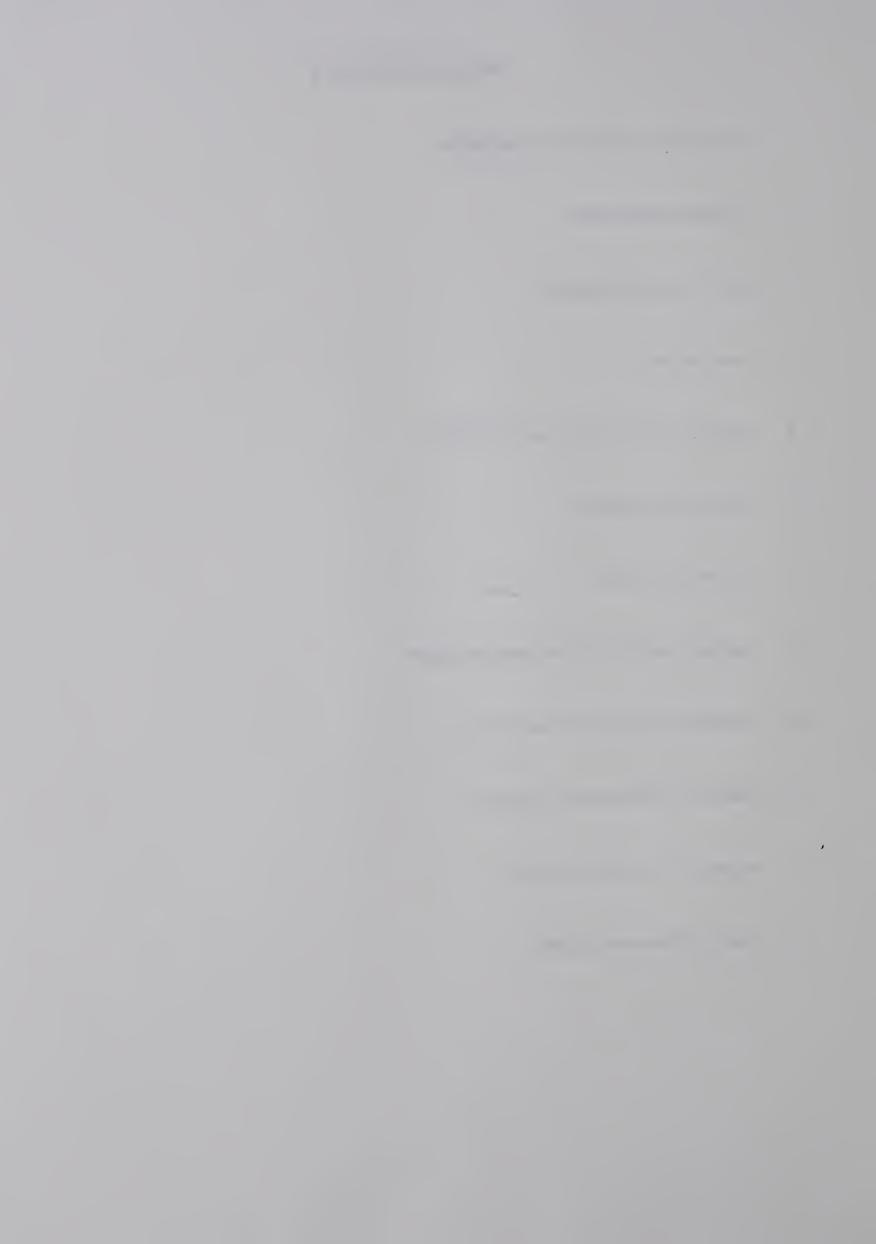
f.   they had too much information to process

APPENDIX L

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INITIAL CATEGORIES

APPENDIX L

INITIAL CATEGORIES

1. classroom management/organization

2. teacher expectations

3. pupil response/behavior

4. environment

5. people who confound the environment

6. instructional behavior

7. children's attitudes

8. teacher's beliefs, attitudes and philosophy

9. children's attributes and experience

10. teacher's attributes and experience

11. aspects of the lesson/activity
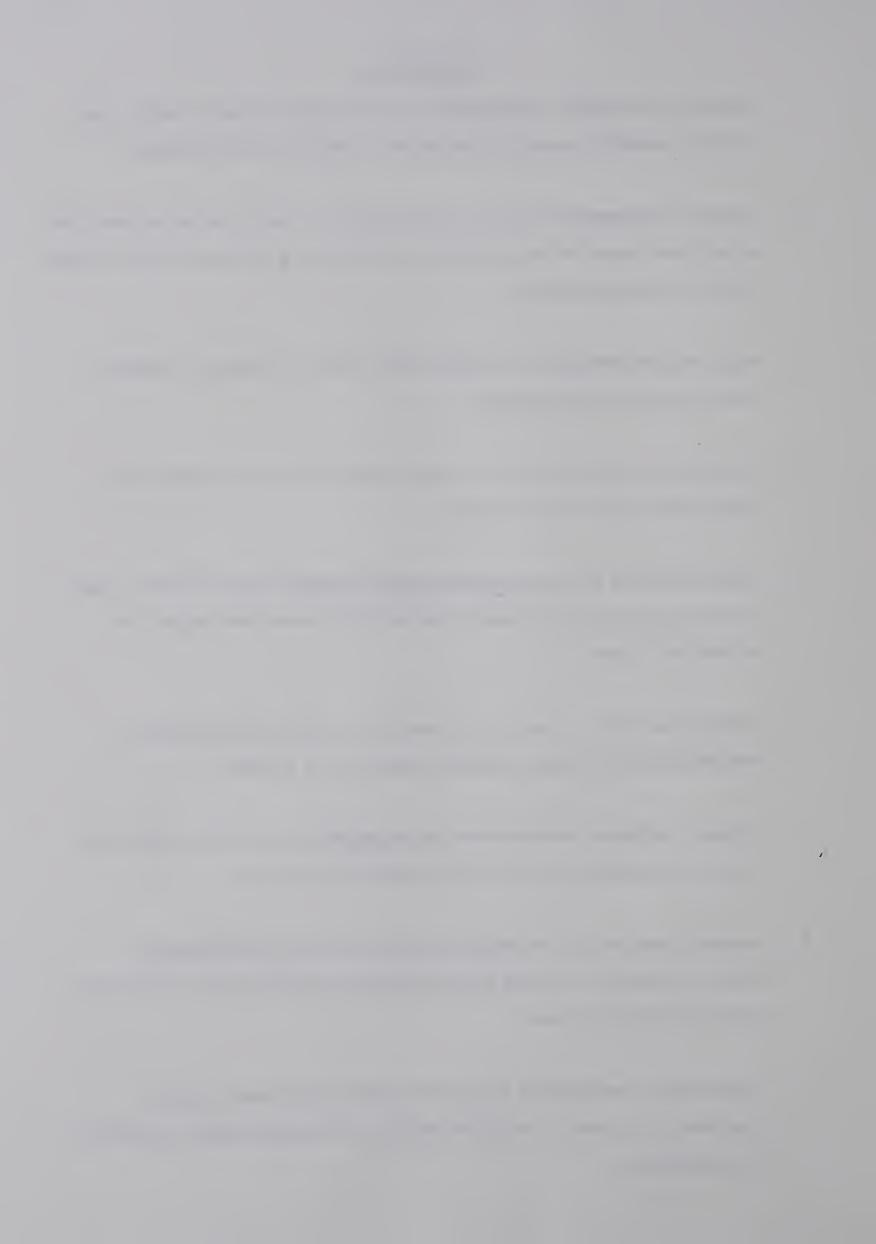
12. goals of the lesson/activity

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CATEGORIES AND DEFINITIONS

CATEGORIES

1. **planning, management and organization**: this includes the teacher behavior and decisions regarding classroom management, organization and lesson plans.

2. **teacher's experiences**: this includes all the things the teacher has encountered, has experienced, things that have happened to the teacher, and things that she has done which has influenced behavior.

3. **pupil response/behavior**: this includes all the student's responses or behavior which occurred during the lesson.

4. **environment**: this includes all those factors which surround the situation, the teacher cannot control these variables.

5. **people who have a current and direct input on student teacher behavior**: these are all the people who are presently interacting with the student teacher (not including the children).

6. **instructional behavior**: these are the behaviors the teacher uses during the instructional period, things the teacher does with or to students.

7. **children's attitudes, characteristics and experience**: this includes all the things with which the children come to the instructional situation with.

8. **teacher's ideas, beliefs and characteristics**: this includes all the teacher's attitudes, attributes, philosophy and expectations concerning herself, the children and the learning environment.

9. **characteristics and goals of the lesson/activity**: this includes the goals, objectives or purposes of the activity/lesson and the characteristics or aspects of the activity/lesson.

APPENDIX N

CATEGORIZATION OF VARIABLES

APPENDIX N

CATEGORIZATION OF VARIABLES

The bracketed numbers represent the occurrences of a variable or category.

PLANNING, MANAGEMENT AND ORGANIZATION (330)

Planning, management and organization includes the teacher behavior and decisions regarding classroom management, organization and lesson plans.

1. organization (12)
2. safety (50)
3. amount of structure the teacher desired for the learning environment (9)
4. efficient use of time (40)
5. workability of the activity/lesson plan (96)
6. classroom management (78)
7. teacher's decision (23)
8. care of equipment (12)
9. need to adapt lesson plan (7)
10. teacher's awareness of what was occurring (3)

TEACHER'S EXPERIENCES (167)

Teacher's experiences includes all the things the teacher has encountered, has experienced, things that have happened to the teacher, and things that they have done which has influenced behavior.

1. university education (23)
2. other experiences prior to student teaching (11)
3. people who have been role models for the teacher (66)
4. teacher's previous experiences with activity (48)
5. teacher's previous experiences with the children (19)

PUPIL RESPONSE/BEHAVIOR (244)

Pupil response/behavior includes all the student's responses or behavior which occurred during the lesson.

1. children's lack of disruptive behavior (11)

2. children copying (24)

3. children decided (13)

4. children's response (55)

5. children giving appropriate response (33)

6. children not giving expected/appropriate response (30)

7. children needed help/were having problems (30)

8. children's completion of the activity (5)

9. children's behavior (43)

ENVIRONMENT (207)

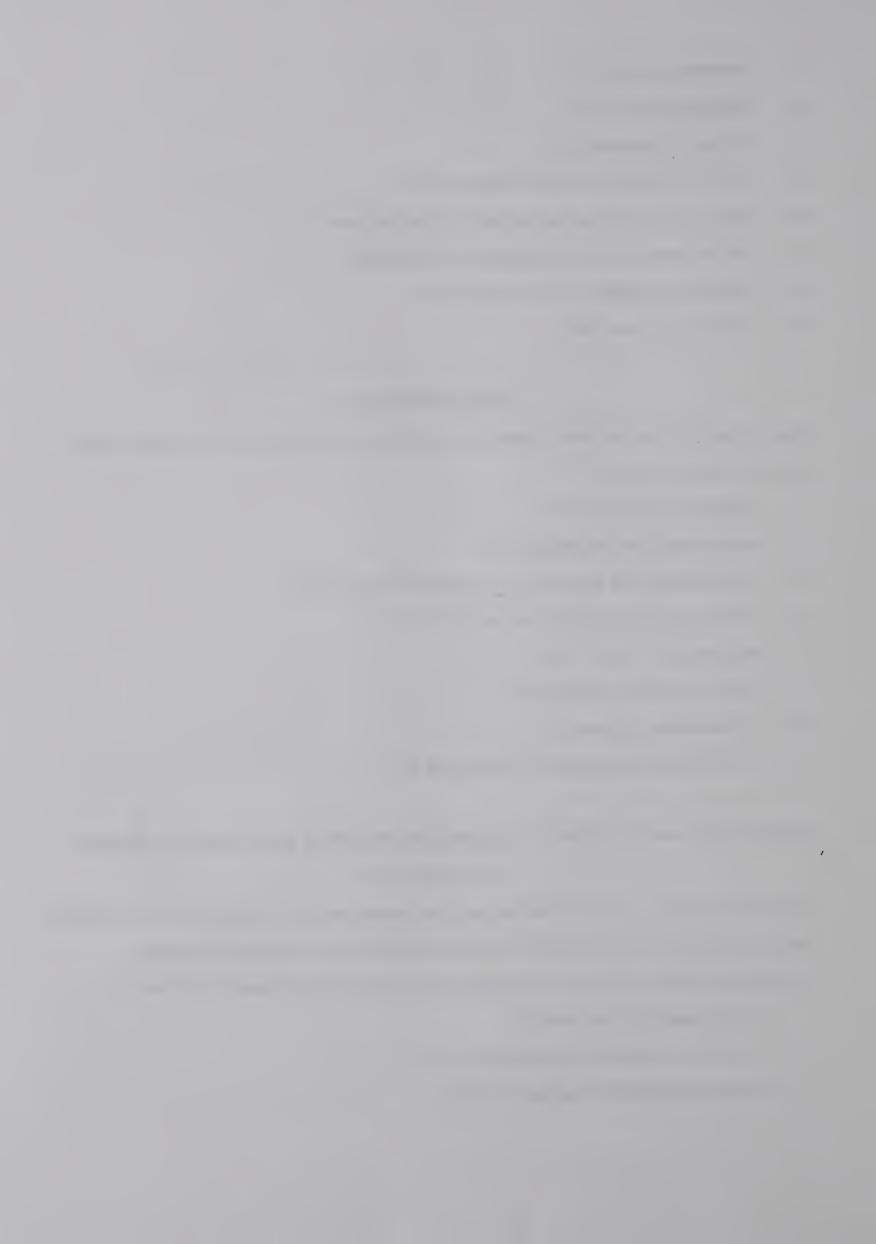Environment includes all those factors which surround the situation, the teacher cannot control these variables.

1. equipment availability (27)

2. extra-classroom influences (26)

3. classroom routine set up prior to student teaching (55)

4. other issues impinging on the environment (11)

5. the gym environment (18)

6. limited time/time available (45)

7. numbers/size of group (17)

8. no control over equipment organization (8)

PEOPLE WHO HAVE A CURRENT AND DIRECT INFLUENCE ON STUDENT TEACHER BEHAVIOR (76)

People who have a current and direct input on student teacher behavior are all the people who are presently interacting with the student teacher (not including the children).

Cooperating teacher's position in regards to evaluating the education practicum (16)

1. people observing me teach (8)

2. movement supervisor suggested it (19)

3. cooperating teacher's suggestion (33)

INSTRUCTIONAL BEHAVIOR (424)

Instructional behavior are the behaviors the teacher uses during the instructional period, things the teacher does with or to students.

1. giving reinforcement (37)
2. teacher giving feedback (19)
3. use of cues (47)
4. giving an explanation (35)
5. teacher extending performance (96)
6. teacher focusing performance (20)
7. giving aid to the children (6)
8. use of observation (75)
9. giving a review (34)
10. teacher motivating children (35)
11. setting an example for the children (20)

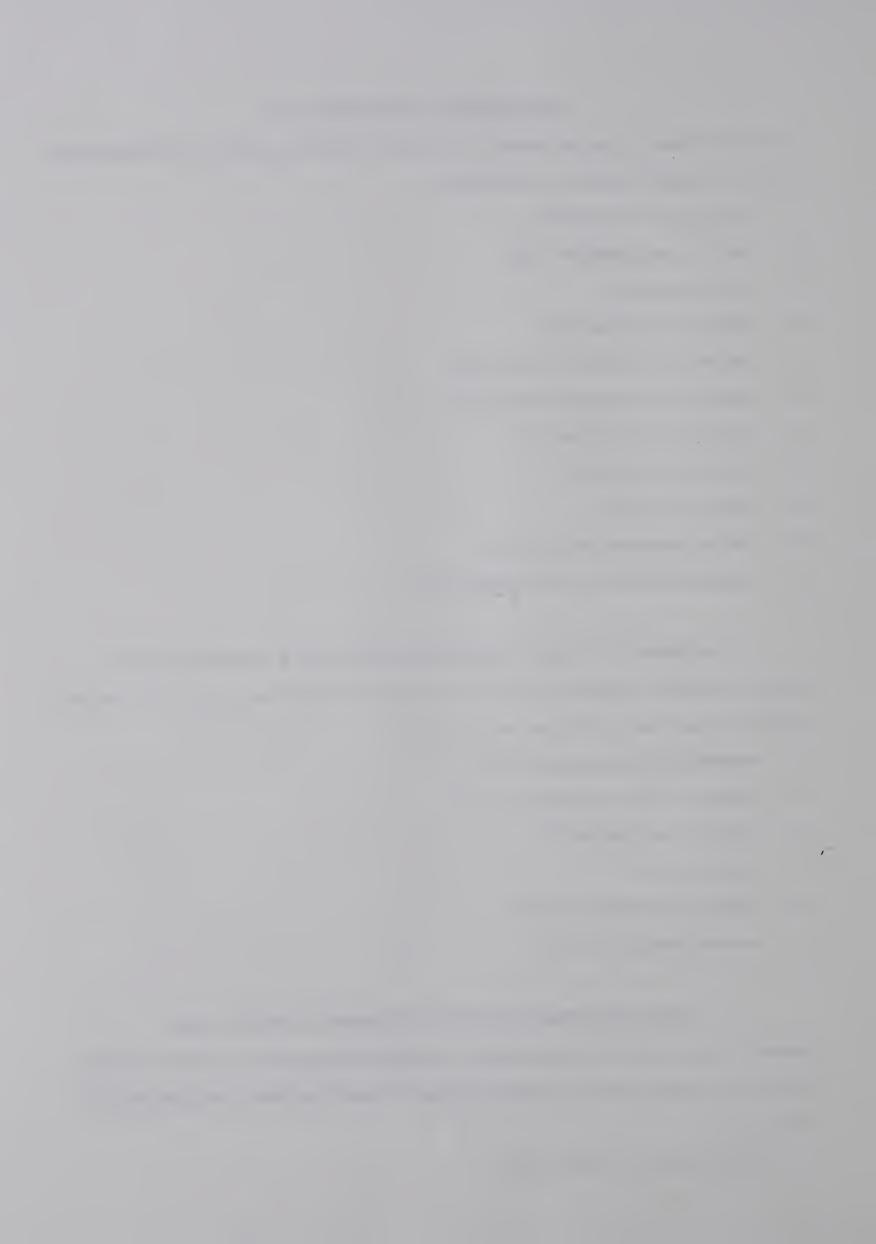## CHILDREN'S ATTITUDE, CHARACTERISTICS AND EXPERIENCES (180)

Children's attitudes, characteristics and experience includes all the things with which the children come to the instructional situation with.

1. children's physical capabilities (17)
2. children's level and experience (102)
3. children's work habits (7)
4. children's era (8)
5. children's emotional status (35)
6. children's energy level (11)

TEACHER'S IDEAS, BELIEFS AND CHARACTERISTICS (432)

Teacher's ideas, beliefs and characteristics includes all the teacher's attitudes, attributes, philosophy and expectations concerning herself/himself, the children and the learning environment.
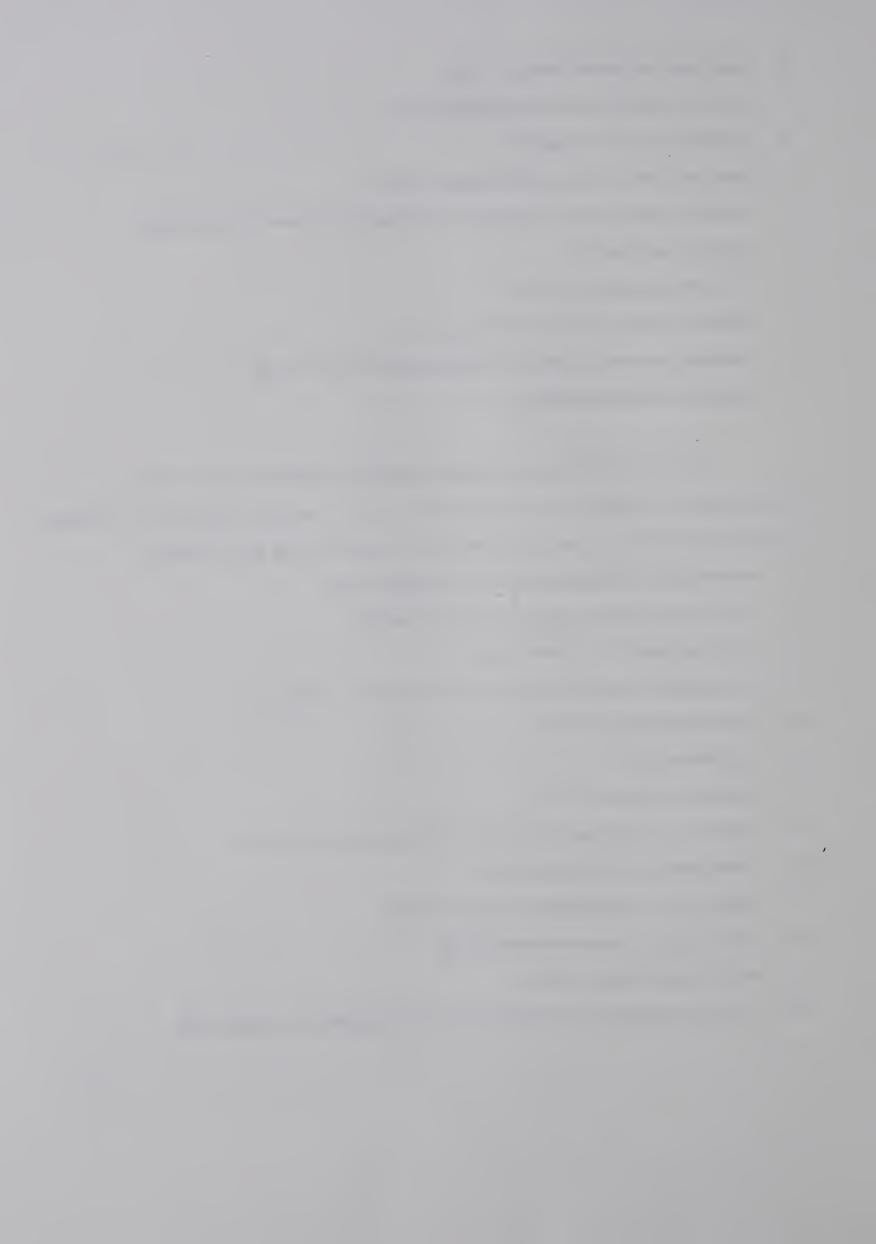
1. emotional status of teacher (51)

2. spontaneous teacher behavior (18)

3. teacher's beliefs concerning children (24)

4. teacher's physical status (14)

5. teacher's desires, personal preferences (54)

6. teacher's belief that the material is important for children to know (38)

7. teacher's abilities (4)

8. projected needs of children (27)

9. teacher's ideas, beliefs and philosophy (48)

10. negative concerns regarding my teaching performance (56)

11. teacher's expectations (98)

CHARACTERISTICS AND GOALS OF THE LESSON/ACTIVITY (499)

Characteristics and goals of the lesson/activity includes the goals, objectives or purposes of the activity/lesson and the characteristics or aspects of the activity/lesson.

1. material less confusing/children can manage it (19)

2. to promote student togetherness as a group (8)

3. affective goals for children (15)

4. the equipment/stimulus was appropriate for the activity (26)

5. acclimatize the children (3)

6. warmdown (15)

7. introductory activity (46)

8. amount of physical activity involved in the lesson/activity (18)

9. characteristics of the activity (53)

10. sequence and progression of material (120)

11. significance of the lesson material (49)

12. lesson theme/objective (68)

13. gives the children the opportunity to make decisions/be creative (59)

APPENDIX O

RANKED VARIABLES

RANKED VARIABLES

Student Teacher #1
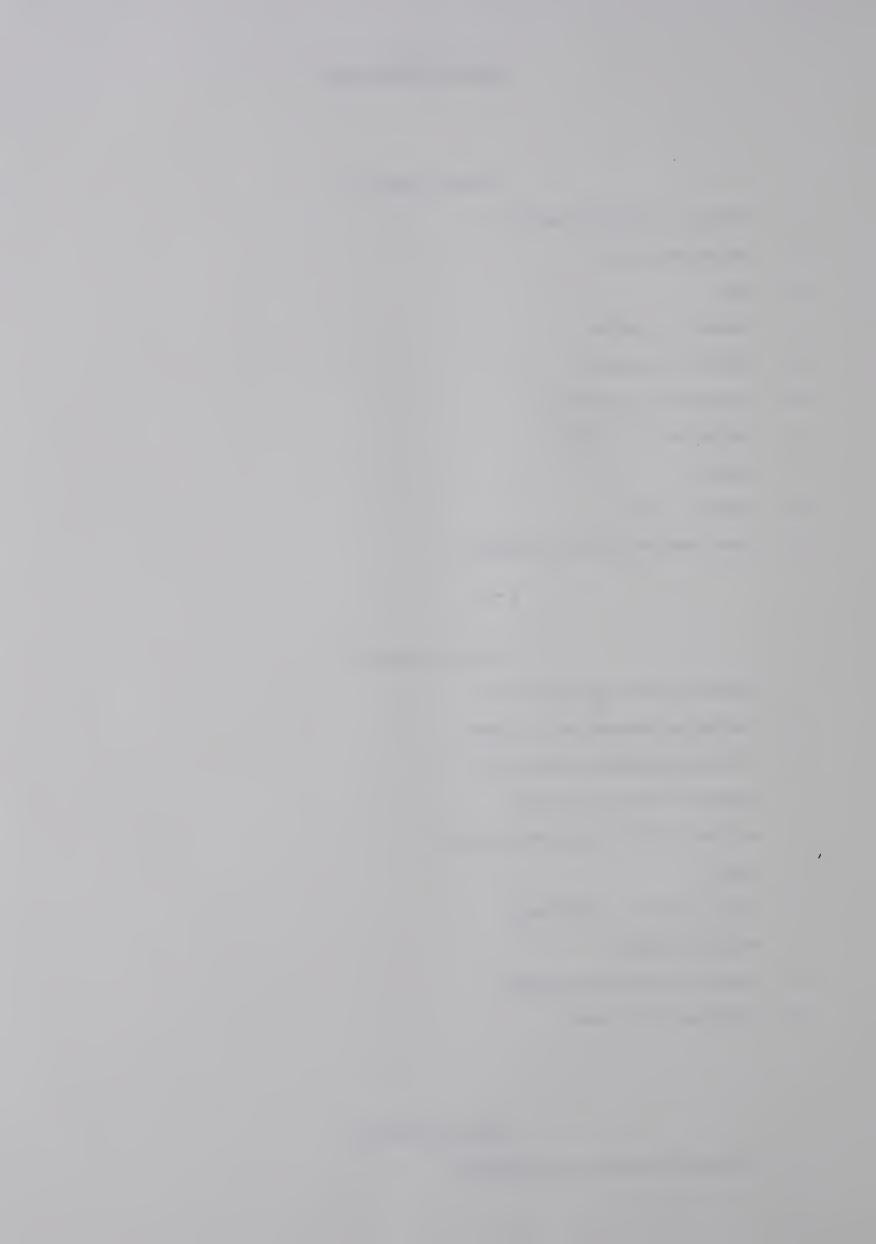
1. children's level and experience
2. cooperating teacher
3. time
4. goals and objectives
5. advance organization
6. my previous experience
7. starting point of children
8. safety
9. teacher control
10. lesson sequencing and organization

Student Teacher #2

1. children's ability, age, experience
2. creating an individualized program
3. my work experience with CMEP
4. movement education courses
5. wanted children to experiment explore
6. safety
7. need for positive reinforment
8. university training
9. exposure to different teachers
10. observers in the room

Student Teacher #3

1. cooperating teacher recommended it

2. cooperating teacher's expectations

3. other group sets up equipment

4. time required to set up equipment

5. insufficient time

6. it is not what I'm used to

7. work with CMEP

8. class procedures/policy

9. safety

10. my mood

Student Teacher #4

1. children's level and experience

2. children should know my expectations

3. children should be able to make their own decisions

4. focus of lesson shifted

5. efficient use of time

6. freedom of choice, give them a choice

7. consistency

8. basis to start, a lead in

9. experience with other class/activity

10. the environment

Student Teacher #5

1. children's level and experience

2. ideas, beliefs and philosophy

3. movement education courses

4. being comfortable with the material

5. wanting to give the children exposure to dance

6. children's negative responses

7. children's positive responses

8. results of previous lesson

9. sequential progression of material

10. time restraints

Student Teacher #6

1. time

2. children

3. my experience

4. space/equipment

5. objective of lesson

6. enjoyment/fun

7. cooperating teacher's style

8. size of class

9. philosophy

10. personal preference

Student Teacher #7

1. the students

2. have the students develop a good self-concept

3. explore new ideas and develop awareness

4. themes

5. imagination, creativity, independence

6. subject integration

7. new material

8. energy levels

9. size of gym

10. fun activities

2.

3.

Student Teacher #8
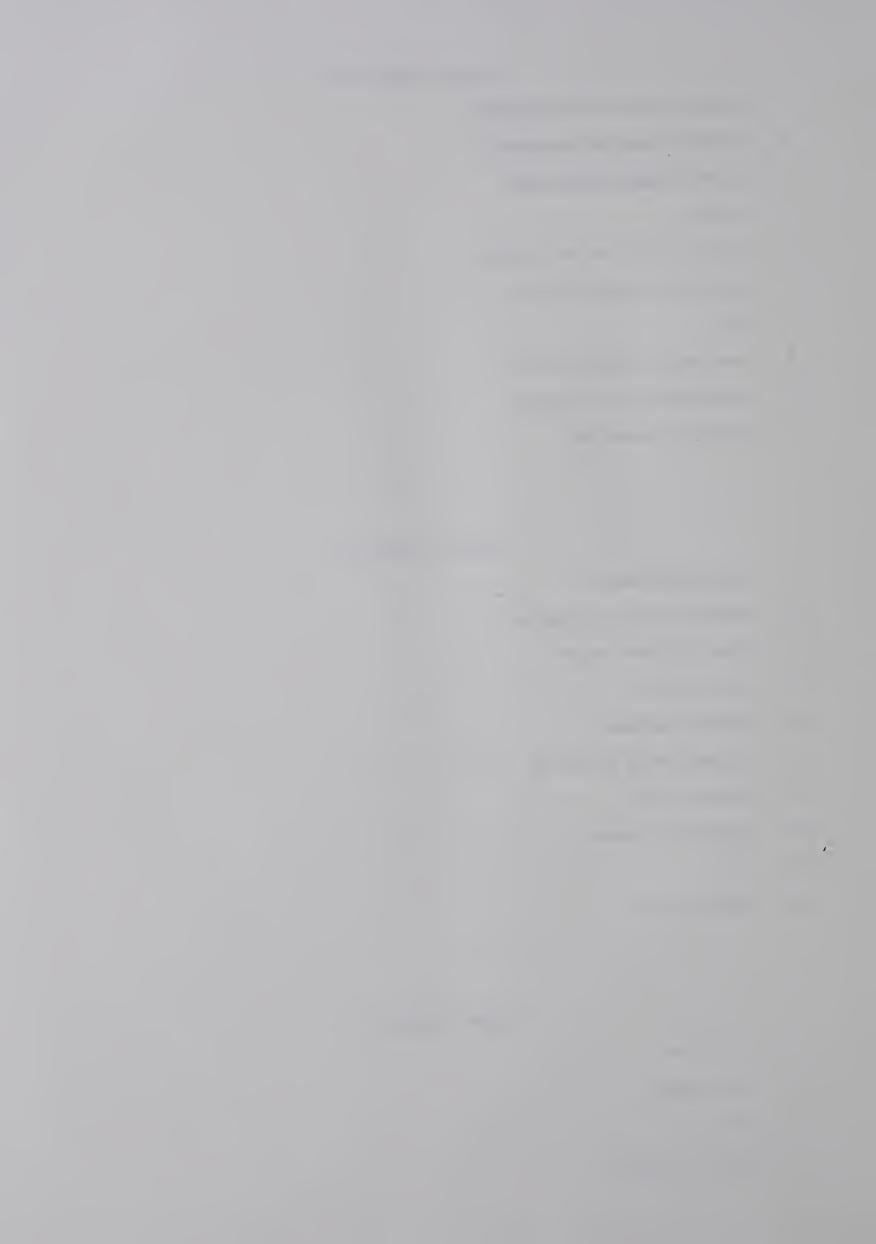
1. children's needs and capabilities

2. children's level and experience

3. beliefs, ideas and philosophy

4. intuition

5. classroom procedures and policy

6. cooperating teacher's style

7. time

8. checking for understanding

9. logical sequence of material

10. movement supervisor

Student Teacher #9

1. cooperating teacher

2. children's level and experience

3. voice projection in gym

4. enjoyment, fun

5. children's behavior

6. children's mood or attitude

7. different skills

8. to get them involved

9. safety

10. insufficient time

Student Teacher #10

1. the children

2. size of space

3. ability level

4. number of children

5. safety

6. time

7. fun

8. equipment

9. my ability

10. my preference

Student Teacher #11

1. children's energy

2. children's behavior

3. children's past experience

4. my reactions to their performance

5. my patience and the day as a whole

6. cooperating teacher

7. class procedures and policy

8. amoung of preparation for lesson

9. time of the day

10. relevance for the children